

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# Legal Compilation

*Statutes and Legislative History*

*Executive Orders*

*Regulations*

*Guidelines and Reports*







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JANUARY 1973

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WILLIAM D. RUCKELSHAUS  
*Administrator*

Environmental Protection Agency  
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## **ENVIRONMENTAL PROTECTION AGENCY**

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## FOREWORD

It has been said that America is like a gigantic boiler in that once the fire is lighted, there are no limits to the power it can generate. Environmentally, the fire has been lit.

With a mandate from the President and an aroused public concerning the environment, we are experiencing a new American Revolution, a revolution in our way of life. The era which began with the industrial revolution is over and things will never be quite the same again. We are moving slowly, perhaps even grudgingly at times, but inexorably into an age when social, spiritual and aesthetic values will be prized more than production and consumption. We have reached a point where we must balance civilization and nature through our technology.

The U.S. Environmental Protection Agency, formed by Reorganization Plan No. 3 of 1970, was a major commitment to this new ethic. It exists and acts in the public's name to ensure that due regard is given to the environmental consequences of actions by public and private institutions.

In a large measure, this is a regulatory role, one that encompasses basic, applied, and effects research; setting and enforcing standards; monitoring; and making delicate risks—benefit decisions aimed at creating the kind of world the public desires.

The Agency was not created to harass industry or to act as a shield behind which man could wreak havoc on nature. The greatest disservice the Environmental Protection Agency could do to American industry is to be a poor regulator. The environment would suffer, public trust would diminish and instead of free enterprise, environmental anarchy would result.

It was once sufficient that the regulatory process produce wise and well-founded courses of action. The public, largely indifferent to regulatory activities, accepted agency actions as being for the "public convenience and necessity." Credibility gaps and cynicism make it essential not only that today's decisions be wise and well-founded but that the public know this to be true. Certitude, not faith, is de rigueur.

In order to participate intelligently in regulatory proceedings, the citizen should have access to the information available to the agency. EPA's policy is to make the fullest possible disclosure of information,

without unjustifiable expense or delay, to any interested party. With this in mind, the EPA Compilation of Legal Authority was produced not only for internal operations of EPA, but as a service to the public, as we strive together to lead the way, through the law, to preserving the earth as a place both habitable by and hospitable to man.

WILLIAM D. RUCKELSHAUS,  
*Administrator*  
*U.S. Environmental Protection Agency*

## PREFACE

Reorganization Plan No. 3 of 1970 transferred 15 governmental units with their functions and legal authority to create the U.S. Environmental Protection Agency. Since only the major laws were cited in the Plan, the Administrator, William D. Ruckelshaus, requested that a compilation of EPA legal authority be researched and published.

The publication has the primary function of providing a working document for the Agency itself. Secondly, it will serve as a research tool for the public.

A permanent office in the Office of Legislation has been established to keep the publication updated by supplements.

It is the hope of EPA that this set will assist in the awesome task of developing a better environment.

LANE WARD, J.D.,  
*Assistant Director for Field Operations*  
*Office of Legislation*  
*U.S. Environmental Protection Agency.*

## ACKNOWLEDGMENT

The idea of producing a compilation of the legal authority of EPA was conceived and commissioned by William D. Ruckelshaus, Administrator of EPA. The production of this compilation involved the cooperation and effort of numerous sources, both within and outside the Agency. The departmental libraries at Justice and Interior were used extensively; therefore we express our appreciation to Marvin P. Hogan, Librarian, Department of Justice; Arley E. Long, Land & Natural Resources Division Librarian, Department of Justice; Fred-eric E. Murray, Assistant Director, Library Services, Department of the Interior.

For exceptional assistance and cooperation, my gratitude to: Gary Baise, formerly Assistant to the Administrator, currently, Director, Office of Legislation, who first began with me on this project; A. James Barnes, Assistant to the Administrator; K. Kirke Harper, Jr., Special Assistant for Executive Communications; John Dezzutti, Administrative Assistant, Office of Executive Communications; Roland O. Sorensen, Chief, Printing Management Branch, and Jacqueline Gouge and Thomas Green, Printing Management Staff; Ruth Simpkins, Janis Collier, Wm. Lee Rawls, James G. Chandler, Jeffrey D. Light, Randy Mott, Thomas H. Rawls, and John D. Whittaker, Peter J. McKenna, Linda L. Payne, John M. Himmelberg, and Dana W. Smith, a beautiful staff who gave unlimited effort; and to many others, behind the scenes who rendered varied assistance.

LANE WARD, J.D.,  
*Assistant Director for Field Operations*  
*Office of Legislation*     •  
*U.S. Environmental Protection Agency.*

## INSTRUCTIONS

The goal of this text is to create a useful compilation of the legal authority under which the U.S. Environmental Protection Agency operates. These documents are for the general use of personnel of the EPA in assisting them in attaining the purposes set out by the President in creating the Agency. This work is not intended and should not be used for legal citations or any use other than as reference of a general nature. The author disclaims all responsibility for liabilities growing out of the use of these materials contrary to their intended purpose. Moreover, it should be noted that portions of the Congressional Record from the 92nd Congress were extracted from the "unofficial" daily version and are subject to subsequent modification.

EPA Legal Compilation consists of the Statutes with their legislative history, Executive Orders, Regulations, Guidelines and Reports. To facilitate the usefulness of this composite, the Legal Compilation is divided into the eight following chapters:

- |                |                  |
|----------------|------------------|
| A. General     | E. Pesticides    |
| B. Air         | F. Radiation     |
| C. Water       | G. Noise         |
| D. Solid Waste | H. International |

### WATER

The chapter labeled "Water" and color coded blue contains the legal authority of the Agency as it applies to water pollution abatement. It is well to note that any law which is applicable to more than one chapter of the compilation will appear in each of the chapters; however, its legislative history will be cross referenced into the "General" chapter where it is printed in full.

### SUBCHAPTERS:

#### Statutes and Legislative History

For convenience, the Statutes are listed throughout the Compilation by a one-point system, i.e., 1.1, 1.2, 1.3, etc., and Legislative History begins wherever a letter follows the one-point system.

Thusly, any 1.1a, 1.1b, 1.2a, etc., denotes the public laws comprising the 1.1, 1.2 statute. Each public law is followed by its legislative history. The legislative history in each case consists of the House Report, Senate Report, Conference Report (where applicable), the Congressional Record beginning with the time the bill was reported from committee.

Example: 1.4 Amortization of Pollution Control Facilities, as amended, 26 U.S.C. §169 (1969).

1.4a Amortization of Pollution Control Facilities, December 30, 1969, P.L. 91-172, §704, 83 Stat. 667.

- (1) House Committee on Ways and Means, H.R. REP. No. 91-413 (Part I), 91st Cong., 1st Sess. (1969).
- (2) House Committee on Ways and Means, H.R. REP. No. 91-413 (Part II), 91st Cong., 1st Sess. (1969).
- (3) Senate Committee on Finance, S. REP. No. 91-552, 91st Cong., 1st Sess. (1969).
- (4) Committee of Conference, H.R. REP. No. 91-782, 91st Cong., 1st Sess. (1969).
- (5) Congressional Record, Vol. 115 (1969):
  - (a) Aug. 7: Debated and passed House, pp. 22746, 22774-22775;
  - (b) Nov. 24, Dec. 5, 8, 9: Debated and passed Senate, pp. 35486, 37321-37322, 37631-37633, 37884-37888;
  - (c) Dec. 22: Senate agrees to conference report, p. 40718;\*
  - (d) Dec. 22: House debates and agrees to conference report, pp. 40820, 40900.

This example not only demonstrates the pattern followed for legislative history, but indicates the procedure where only one section of a public law appears. You will note that the Congressional Record cited pages are only those pages dealing with the discussion and/or action taken pertinent to the section of law applicable to EPA. In the event there is no discussion of the pertinent section, only action or passage, then the asterisk (\*) is used to so indicate, and no text is reprinted in the Compilation. In regard to the situation where only one section of a public law is applicable, then only the parts of the report dealing with same are printed in the Compilation.



## Secondary Statutes

Many statutes make reference to other laws and rather than have this manual serve only for major statutes, these secondary statutes have been included where practical. These secondary statutes are indicated in the table of contents to each chapter by a bracketed cite to the particular section of the major act which made the reference.

## Citations

The United States Code, being the official citation, is used throughout the Statute section of the compilation. In four Statutes, a parallel table to the Statutes at Large is provided for your convenience.

### TABLE OF STATUTORY SOURCE

STATUTES	SOURCE
1.1 River and Harbor Act of 1899, 33 U.S.C. §§403, 407, 411 (1899).	E.O. 11574 sets out EPA's function under this Act.
1.2 Federal Water Pollution Control Act, as amended, 33 U.S.C. §1151 <i>et seq.</i> (1970).	Transferred to EPA in Reorg. Plan No. 3 of 1970.
1.3 Pollution of the Sea by Oil, as amended, 33 U.S.C. §1001 <i>et seq.</i> (1966).	Implements the Convention of
1.4 Advances of Public Moneys, Prohibition Against, as revised, 31 U.S.C. §529 (1946).	Referred to in the Federal Water Pollution Control Act at §1155(g) (3) (A).
1.5 Public Contracts, Advertisements for Proposals for Purchases and Contracts for Supplies or Services for Government Departments; App Application to Government Sales and Contracts to Sell and to Government Corporations, as amended, 41 U.S.C. §5 (1958).	Referred to in Federal Water Pollution Control Act in §1155(g) (3) (A).
1.6 Courts of Appeals, Certiorari; Appeal; Certified Questions, as amended, 28 U.S.C. §1254 (1948).	Referred to in the Federal Water Pollution Control Act at §1157(g) (2).
1.7 Davis-Bacon Act, as amended, 40 U.S.C. §276a-275a-5 (1964).	Referred to in the Federal Water Pollution Control Act at §1158(g).
1.8 Per Diem, Travel and Transportation Expenses; Experts and Consultants; Individuals Serving Without Pay, as amended, 5 U.S.C. §5703 (1966).	Referred to in the Federal Water Pollution Control Act at §1159(a) (2) (B), 1160(c) (4), (i).
1.9 1909 Boundry Waters Treaty Between Canada and the United States, and the Water Utilization Treaty of 1944 Between Mexico and the United States, 36 Stat. 2448 (1909), 59 Stat. 1219 (1944).	Referred to in the Federal Water Pollution Control Act at §1160(d) (2).

STATUTES	SOURCE
1.10 Disclosure of Confidential Information Generally, as amended, 18 U.S.C. §1905 (1948).	Referred to in the Federal Water Pollution Control Act at §§1160(f) (2), (k), (1), 1163(g) (3).
1.11 Convention on the Territorial Sea and the Contiguous Zone, Article XXIV, 5 U.S.T. 1612, 1613 (1958).	Referred to in the Federal Water Pollution Control Act at §1161(a) (9).
1.12 International Convention for the Prevention of Pollution of the Sea by Oil, 1954, Article IV, as amended, 17 U.S.T. 1528 (1954).	Referred to in the Federal Water Pollution Control Act at §1161(b) (2) (A).
1.13 Granting Clearances, as amended, 46 U.S.C. §91 (1951).	Referred to in the Federal Water Pollution Control Act at §1161(b) (5).
1.14 Outer Continental Shelf Lands Act, as amended, 43 U.S.C. §1331 <i>et seq.</i> (1953).	Referred to in the Federal Water Pollution Control Act at §1161(i) (2).
1.15 Administrative Procedure Act, as amended, 5 U.S.C. §§551-559, 701-705 (1968).	Referred to in the Federal Water Pollution Control Act at §§1162(b), 1163(e).
1.16 Higher Education General Provision, Definitions, as amended, 20 U.S.C. §1141 (1970).	Referred to in the Federal Water Pollution Control Act at §1169(1) (B).
1.17 National Environmental Policy Act of 1969, 42 U.S.C. §4321 <i>et seq.</i> (1970).	Direct reference in the Reorg. Plan No. 3 of 1970.
1.18 Public Health Service Act, as amended, 42 U.S.C. §§241, 243, 246 (1970).	Directly cited in Reorg. Plan No. 3 of 1970.
1.19 The Water Resource Planning Act, as amended, 42 U.S.C. §1962 <i>et seq.</i> (1970).	E.O. 11613.
1.20 Appalachian Regional Development Act of 1965, as amended, 40 App. U.S.C. §§212, 214 (1971).	All functions of the Secretary of the Interior and the Department of the Interior administrative to the Federal Water Quality Administration, all functions which were transferred to the Secretary of the Interior by Reorg. Plan No. 2 of 1966, and all functions vested in the Secretary of the Interior of the Department of the Interior by the Federal Water Pollution Control Act were transferred to the Administrator of the Environmental Protection Agency by Reorg. Plan No. 3 of 1970.
1.21 The Disaster Relief Act, 42 U.S.C. §4401 <i>et seq.</i> (1970).	Direct reference made to the Water Quality Administration at the Department of the Interior by E.O. 11490, §§703(3), 1102(1), 1103(2), etc., this administration being transferred to EPA through Reorg. Plan No. 3 of 1970.
1.22 Department of Transportation Act, 49 U.S.C. §1653(f) (1968).	The Federal Water Pollution Control Act in section 1153 regarding the preservation of fish and wildlife.

STATUTES	SOURCE
1.23 Federal Aid Highway Act, as amended, 23 U.S.C. §109(h) (1970).	The Act at §109(h) requires the Secretary of Transportation to consult with the appropriate agency dealing with water pollution, in this case, the Administrator of EPA, before promulgating guidelines for any proposed project on any federal aid system.
1.24 Amortization of Pollution Control Facilities, as amended, 26 U.S.C. §169(d) (1) (B), (3) (1969).	The section cited in the Act refers directly to the Federal Water Pollution Control Act and the Federal certifying authority requirement filing to the Secretary of the Interior in the case of water pollution, both functions being transferred through Reorg. Plan
1.25 Airport and Airway Development Act, 49 U.S.C. §§1712(f), 1716(c) (4), (e) (1970).	Direct reference made to water pollution and the appropriate agency to deal with same in the Act.
1.26 Interest on Certain Government Obligations, as amended, 26 U.S.C. §103 (1969).	The sections of the Act provide a tax relief on industrial development bonds for sewage or solid waste disposal facility and water pollution control facilities, at the section cited.
1.27 Fish and Wildlife Coordination Act, as amended, 16 U.S.C. §§661-666c (1965).	E.O. 11574, Administration of Refuse Act Permit Program.

### Executive Orders

The Executive Orders are listed by a two-point system (2.1, 2.2, etc.). Executive Orders found in General are ones applying to more than one area of the pollution chapters.

### Regulations

The Regulations are noted by a three-point system (3.1, 3.2, etc.). Included in the Regulations are those not only promulgated by the Environmental Protection Agency, but those under which the Agency has direct contact.

### Guidelines and Reports

This subchapter is noted by a four-point system (4.1, 4.2, etc.). In this subchapter is found the statutorily required reports of EPA, published guidelines of EPA, selected reports other than EPA's and inter-departmental agreements of note.

### UPDATING:

Periodically, a supplement will be sent to the interagency distribution and made available through the U.S. Government Printing Office in order to provide an accurate working set of EPA Legal Compilation.



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(1) House Committee on Public Works, H.R. REP. No. 2021, 89th Cong., 2d Sess. (1966).	824
(2) Senate Committee on Public Works, S. REP. No. 1367, 89th Cong., 2d Sess. (1966).	944
(3) Committee of Conference, H.R. REP. No. 2289, 89th Cong., 2d Sess. (1966).	1005
(4) Congressional Record, Vol. 112 (1966):	
(a) July 13: Considered and passed Senate, pp. 15585-15603; 15605-15620; 15624-15633;	1033

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(b) Sept. 30: Considered and passed House, pp. 24546-24547; 24592-24619; 24622-24624; 24629;	1124
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(c) Oct. 17: House and Senate agree to conference report, pp. 27131; 27137-27141; 27244-27247.	1195
1.2k The Water Quality Improvement Act of 1970, April 3, 1970, P.L. 91-224, 84 Stat. 91.	1212
(1) House Committee on Public Works, H.R. REP. No. 91-127, 91st Cong., 1st Sess. (1969).	1247
(2) Senate Committee on Public Works, S. REP. No. 91-351, 91st Cong., 1st Sess. (1969).	1324
(3) Committee of Conference, H.R. REP. No. 91-940, 91st Cong., 2d Sess. (1970).	1470
(4) Congressional Record:	
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(b) Vol. 115 (1969), Oct. 7, 8: Considered and passed Senate, amended, pp. 28947; 28953-29008; 29046-29065; 29089-29102;	1762
(c) Vol. 116 (1970), March 24: Senate agreed to conference report, pp. 8975; 8983-8984; 9003-9008;	1964
(d) Vol. 116 (1970), March 25: House agreed to conference report, pp. 9325-9334.	1976
(5) Message from the President of the United States "Conservation and Water Management," H.R. REP. Doc. No. 273, 90th Cong., 2d Sess. (1968).	1997
1.2l Rivers and Harbors Act of 1970, December 31, 1970, P.L. 91-611, Title I, §§120, 123, 84 Stat. 1823.	2017
(1) House Committee on Public Works, H.R. REP. No. 91-1665, 91st Cong., 2d Sess. (1970).	2020
(2) Senate Committee on Public Works, S. REP. No. 91-1422, 91st Cong., 2d Sess. (1970).	2023
(3) Committee of Conference, H.R. REP. No. 91-1782, 91st Cong., 2d Sess. (1970).	2024
(4) Congressional Record, Vol. 116 (1970):	
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(c) Dec. 18: House agreed to conference report, pp. 42509, 42512;	2034

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(d) Dec. 19: Senate agreed to conference report, pp. 42724.	2035
1.2m Extension of Authorized Funds for Federal Water Pollution Control Act of 1971, July 9, 1971, P.L. 92-50, §§2, 3, 85 Stat. 124.	2035
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(2) Congressional Record, Vol. 117 (1971):	
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(b) July 1: Considered and passed House, pp. H6229-H6230.	2038
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(2) Congressional Record, Vol. 117 (1971):	
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1.2o Extension of Certain Provisions of Federal Water Pollution Control Act of 1971, March 1, 1972, P.L. 92-240, 86 Stat. 47.	2044
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(3) Committee of Conference, H.R. REP. No. 92-834, 92d Cong., 2d Sess. (1972).	2051
(4) Congressional Record, Vol. 118 (1972):	
(a) Feb. 3: Considered and passed Senate, pp. S1165-S1166;	2054
(b) Feb. 7: Considered and passed House, amended, pp. H801-H808;	2055
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(d) Feb. 16: Senate agreed to Conference Report, p. S1901.	2072
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1.3a The Oil Pollution Control Act of 1961, August 30, 1961, P.L. 87-167, 75 Stat. 402.	2080
(1) Senate Committee on Commerce, S. REP. No. 666, 87th Cong., 1st Sess. (1961).	2087
(2) House Committee on Merchant Marine and Fisheries, H.R. REP. No. 838, 87th Cong., 1st Sess. (1961).	2099
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(b) Aug. 21: Passed House, pp. 16520-16521.	2109
1.3b 1966 Amendments to the Oil Pollution Act of 1961, September 1, 1966, P.L. 89-551, 80 Stat. 372.	2109

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(1) House Committee on Merchant Marine and Fisheries, H.R. REP. No. 1620, 89th Cong., 2d Sess. (1966).	2113
(2) Senate Committee on Commerce, S. REP. No. 1479, 89th Cong., 2d Sess. (1966).	2136
(3) Congressional Record, Vol. 112 (1966):	
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(b) Jan. 21, 23: Amended and passed Senate, pp. 147-150;	2163
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1.4b To Authorize Certain Administrative Expenses in the Government Services, and for Other Purposes, August 2, 1946, P.L. 79-600, §11, 60 Stat. 809.	2163
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<sup>1</sup> Document in Dept. of Interior Library, but in nonreproducible condition.

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1.6b Act to Amend the Judicial Code and to Further Define the Jurisdiction of Circuit Courts of Appeal and of the Supreme Court and for Other Purposes, February 13, 1925, P.L. 68-415, §1, 43 Stat. 938-939.	2168
(1) Senate Committee on the Judiciary, S. REP. No. 362, 68th Cong., 1st Sess. (1924).	2174
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(b) Feb. 3: Amended and passed Senate, p. 2928;	2188
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(1) House Committee on the Judiciary, H.R. REP. No. 370, 70th Cong., 1st Sess. (1928).	2191
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(a) Jan. 14: Passed Senate, p. 1486;	2192
(b) Jan. 25: Passed House, p. 2040.	2192
1.6d 1934 Amendments to 1893 Act, June 7, 1934, P.L. 73-298, 48 Stat. 926.	2192
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(1) House Committee on Ways and Means, H.R. REP. No. 868, 74th Cong., 1st Sess. (1935).	2297
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1.13b 1938 Amendments to §§91, 92 of Title 46 U.S.C., June 16, 1938, P.L. 75-656, §1, 52 Stat. 758.	2302
(1) House Committee on Merchant Marine and Fisheries, H.R. REP. No. 2521, 75th Cong., 3rd Sess. (1938).	2304
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(3) Congressional Record, Vol. 83 (1938):	
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1.13c 1946 Reorganization Plan No. 3, §§101-104, May 16, 1946, 11 Fed. Reg. 7875, 60 Stat. 1097.	2308
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(1) House Committee on Ways and Means, H.R. REP. No. 2453, 83rd Cong., 2d Sess. (1954).	2310
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(3) Congressional Record, Vol. 100 (1954):	
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(1) House Committee on the Judiciary, H.R. REP. No. 901, 89th Cong., 1st Sess. (1965).	2581
(2) Senate Committee on the Judiciary, S. REP. No. 1380, 89th Cong., 2d Sess. (1966).	2591
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(3) Congressional Record, Vol. 113 (1967):	
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(c) May 25: House concurs in Senate amendments, p. 14056.	2621
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(1) House Committee on the Judiciary, H.R. REP. No. 1721, 90th Cong., 2d Sess. (1968).	2622
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1.16a Higher Education Act of 1965, November 8, 1965, P.L. 89-329, Title XII, §801, 79 Stat. 1269.	2627
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(2) Senate Committee on Labor and Public Welfare, S. REP. No. 673, 89th Cong., 1st Sess. (1965).	2629
(3) Committee of Conference, H.R. REP. No. 1178, 89th Cong., 1st Sess. (1965).	2630
(4) Congressional Record, Vol. 111 (1965):	
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(1) Senate Committee on Labor and Public Welfare, S. REP. No. 1387, 90th Cong., 2d Sess. (1968).	2636
(2) House Committee on Education and Labor, H.R. REP. No. 1649, 90th Cong., 2d Sess. (1968).	2644
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(4) Congressional Record, Vol. 114 (1968):	
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(b) July 25: Amended and passed House, p. 23374;	2651
(c) Sept. 26: House agrees to conference report, pp. 28329, 28336-28337, 28339;	2651
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(1) House Committee on Education and Labor H.R. REP. No. 91-114, 91st Cong., 1st Sess. (1969).	2652
(2) Senate Committee on Labor and Public Welfare, S. REP. No. 91-634, 91st Cong., 2d Sess. (1970).	2653
(3) Committee of Conference, H.R. REP. No. 91-937, 91st Cong., 2d Sess. (1970).	2654
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(b) Vol. 116 (1970), Feb. 19: Amended and passed Senate, p. 4141;	2655
(c) Vol. 116 (1970), April 1: Senate agreed to conference report, p. 9999;	2655
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1.17 National Environmental Policy Act of 1969, 42 U.S.C. §4321 <i>et seq.</i> (1970).	2656
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(1) House Committee on Interior and Insular Affairs, H.R. REP. No. 169, 89th Cong., 1st Sess. (1965).	2709
(2) Senate Committee on Interior and Insular Affairs, S. REP. No. 68, 89th Cong., 1st Sess. (1965).	2736
(3) Committee of Conference, H.R. REP. No. 603, 89th Cong., 1st Sess. (1965).	2748
(4) Congressional Record, Vol. 111 (1965):	
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(b) March 31: Amended and passed House, pp. 6406, 6412;	2766
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(1) House Committee on Public Works, H.R. REP. No. 91-1665, 91st Cong., 2d Sess. (1970).	2774
(2) Senate Committee on Public Works, S. REP. No. 91-1422, 91st Cong., 2d Sess. (1970).	2777
(3) Committee of Conference, H.R. REP. No. 91-1782, 91st Cong., 2d Sess. (1970).	2778
(4) Congressional Record, Vol. 116 (1970):	
(a) Dec. 7: Amended and passed House, p. 40148;	2780
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(1) House Committee on Interior and Insular Affairs, H.R. REP. No. 92-197, 92d Cong., 1st Sess. (1971).	2787
(2) Senate Committee on Interior and Insular Affairs, S. REP. No. 92-139, 92d Cong., 1st Sess. (1971).	2791
(3) Congressional Record, Vol. 117 (1971):	
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(b) June 7: Considered and passed Senate, pp. S8377-S8378.	2796
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1.20a Appalachian Regional Development Act of 1965, March 9, 1965, P.L. 89-4, §§212, 214, 79 Stat. 16, 17.	2800
(1) Senate Committee on Public Works, S. REP. No. 13, 89th Cong., 1st Sess. (1965).	2802
(2) House Committee on Public Works, H.R. REP. No. 51, 89th Cong., 1st Sess. (1965).	2807
(3) Congressional Record, Vol. 111 (1965):	
(a) Feb. 1: Amended and passed Senate, p. 1715;*	2809
(b) March 3: Passed House, p. 4030.*	2809
1.20b 1966 Reorganization Plan No. 2, May 10, 1966, 80 Stat. 1608.	2809
1.20c To Revise and Extend the Appalachian Regional Development Act of 1965, and to Amend the Public Works and Economic Development Act of 1965, October 11, 1967, P.L. 90-103, Title I, §§114, 116, 81 Stat. 262, 263.	2812
(1) Senate Committee on Public Works, S. REP. No. 159, 90th Cong., 1st Sess. (1967).	2814
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(c) Sept. 28: House agrees to conference report, p. 27183;	2832
(d) Sept. 29: Senate agrees to conference report, pp. 27327-27328.	2832
1.20d 1969 Amendments to the Appalachian Regional Development Act, November 25, 1969, P.L. 91-123, Title I, §107, 83 Stat. 215.	2833
(1) House Committee on Public Works, H.R. REP. No. 91-336, 91st Cong., 1st Sess. (1969).	2834
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ing to such order as the Secretary shall prescribe shall act as Secretary during the absence or disability of the Secretary or in the event of a vacancy in the office of Secretary.

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**SECTION 303(d)(17) OF THE FEDERAL EXECUTIVE SALARY  
ACT OF 1964**

SEC. 303. (a) \* \* \*

\* \* \* \* \*

(d) Level IV of the Federal executive salary schedule shall apply to the following offices and positions, for which the annual rate of basic compensation shall be \$27,000:

\* \* \* \* \*

(17) Assistant Secretaries of Health, Education, and Welfare  
[ (2) ] (3).

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**1.2h(2) SENATE COMMITTEE ON PUBLIC WORKS**

S. REP. No. 10, 89th Cong., 1st Sess. (1965)

**FEDERAL WATER POLLUTION CONTROL ACT  
AMENDMENTS OF 1965**

---

JANUARY 27, 1965.—Ordered to be printed

---

Mr. MUSKIE, from the Committee on Public Works,  
submitted the following

**R E P O R T**

together with

**INDIVIDUAL VIEWS**

[To accompany S. 4]

The Committee on Public Works, to whom was referred the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishments of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters,

and for other purposes, having considered the same, report favorably thereon, with amendments, and recommend that the bill do pass.

The amendments are indicated in the bill as reported and are shown by linetype and italic.

#### PURPOSE

The purpose of S. 4, is to—

(1) Express the act's purpose to enhance the quality and value of our water resource and to establish a national policy for the prevention, control, and abatement of water pollution;

(2) Provide for an Assistant Secretary of Health, Education, and Welfare to supervise and direct the administration of all functions of the Department related to water pollution, together with such other functions as may be assigned to him by the Secretary, and to establish a Federal Water Pollution Control Administration within the Department of Health, Education, and Welfare whose head shall be appointed by the Secretary and

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who shall administer sections 3, 4, 10, and 11 of this act and other provisions as the Secretary may prescribe;

(3) Authorize research and development grants in the amount of 50 percent of the estimated reasonable cost of projects which will demonstrate new or improved methods of controlling the discharge into any waters of untreated or inadequately treated sewage or other wastes from sewers which carry storm water or both storm water and sewage or other wastes. Authorize appropriations of \$20 million for the fiscal year ending June 30, 1965, and for each of the next 3 succeeding fiscal years for the purpose of making demonstration grants. A grant for any single project shall not exceed 5 percent of the total amount authorized for any one fiscal year;

(4) Increase the individual dollar ceiling limitations on grants for construction of waste treatment works from \$600,000 to \$1 million for a single project and from \$2,400,000 to \$4 million for a joint project involving two or more communities;

(5) Authorize an additional 10 percent in the amount of a grant for construction of waste treatment works in the case of a project which is certified as conforming with a comprehensive plan developed or in process of development for a metropolitan area;

(6) Authorize and direct the application of enforcement measures to abate pollution when any person is prevented from marketing shellfish or shellfish products in interstate commerce

as a result of such pollution and action of Federal, State, or local authorities;

(7) Authorize the Secretary to prepare and to encourage the development of regulations establishing standards of water quality to be applicable to interstate waters. The standards shall be in accord with the act's purpose to protect the public health or welfare and to enhance the quality and value of such waters for appropriate uses. The regulations setting forth standards would be formulated after reasonable notice and public hearing and consultation with the Secretary of the Interior and with other Federal agencies, with State and interstate water pollution control agencies, and with municipalities and industries involved. The Secretary is directed to promulgate the standards if, following his request, the appropriate States and interstate agencies have not developed standards which he finds consistent with the provisions of this act. The Secretary shall also call a public hearing after reasonable notice on his own motion or when petitioned to do so by the Governor of any State subject to or affected by the water quality standards promulgated pursuant to this subsection for the purpose of considering a revision in such standards. The Secretary may, after reasonable notice and public hearing and consultation with the Secretary of the Interior and with other Federal agencies, with State and interstate water pollution control agencies, and with municipalities and industries involved, prepare revised regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof. The discharge of matter into interstate waters, which reduces their quality below the promulgated standards or State or interstate standards established consistent

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with the Act, is subject to abatement under the enforcement procedures presently provided in the act; and

(8) Provide for accountability for financial assistance furnished under the act to accord with acceptable audit and examination practices; and make the authority and functions of the Secretary of Labor with respect to labor standards appropriately applicable to the act's provisions.

#### GENERAL STATEMENT

Public hearings on S. 649 were held by the committee on June 17, 18, 19, 20, 25, and 26, 1963. Officials of the Department of Health, Education, and Welfare, and other departments and agencies, and representatives of State and local governments, interstate water pol-

lution control agencies, conservation organizations, the public health and medical profession, and industry testified at these hearings or presented their views for the record.

On October 4, 1963, the committee favorably reported S. 649, as amended, and it passed the Senate on October 16, 1963, by a substantial majority. The Senate vote was 69 yeas and 11 nays.

The House of Representatives, in its own counsel, did not act on S. 649 before final adjournment. The bill remained with the House committee until September 4, 1964, when it was reported in an amended version.

The bill (S. 4) now reported is identical with the measure previously passed by the Senate with the exception of the deletion of the Federal installations section and the detergent control section.

Recent developments and information have caused the committee to conclude that, because of the interrelationship of both air and water pollution control from Federal installations it would be more appropriate to have legislative proposals for these purposes combined and separate from the bill herewith reported. These proposals are presented in S. 560.

In reporting S. 649 of the 88th Congress the committee made no proposal for the immediate elimination of hard detergents from introduction into interstate commerce. While the committee felt that legislation prohibiting the production and sale of hard detergents was not necessary at that time, it did feel that some procedural legislation might be advisable in order to insure an expeditious solution to the detergent problem. As a result the committee provided for industry and the Department of Health, Education, and Welfare to undertake a cooperative venture in order to solve this problem.

In the meantime more than a year has passed and the soap and detergent industry has announced June 30, 1965, as the new target date for completing the changeover to production of the more readily degradable detergents which is 6 months earlier than it had formerly announced.

In view of the action by the soap and detergent industry, the committee feels that a review of the problem of eliminating hard detergents is in order before adopting control or regulating legislation.

Although extensive public hearings were held in June of 1963 on S. 649, which is identical to S. 4, except for the deletion of the above-mentioned provisions relating to Federal installations and soap and detergents, additional public hearings were held on January 18, 1965.

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Officials of the Department of Health, Education, and Welfare, and



representatives of State and local governments, interstate water pollution control agencies, conservation organizations, the public health and medical profession, and industry testified at these hearings or presented their views for the record.

It is the view of the committee that the bill as reported provides for necessary strengthening of existing authority and furnishes required new provisions for the purpose of assuring effective prevention and control of water pollution.

#### MAJOR PROVISIONS OF BILL

##### NATIONAL WATER POLLUTION CONTROL POLICY

The national water pollution control program has for its primary objective the enhancement of the quality and value of the Nation's water resources. This can only be done by preventing, controlling, and abating water pollution.

The Federal Water Pollution Control Act is the basic statutory authority for Federal participation in the national program. The act authorizes the administration and conduct of programs directed to the achievement of the important national water quality goal. The bill provides for specific expression of the act's purpose to establish a national policy for the prevention, control, and abatement of water pollution through effective administration of its comprehensive authorities.

##### ADMINISTRATION

##### *Federal Water Pollution Control Administration*

The committee believes that the program of water pollution control, which relates not only to the health of the people but also has a substantial effect on our economic vitality and the natural beauty of our Nation, must have strong administrative leadership. Pollution is a serious national water resources problem. The injurious effects of water pollution have adverse implications for the development and preservation of our water resources. The individual citizen, industry, agricultural, and commerce are all affected and through them the Nation's health and its economy. In providing authorities for Federal technical and financial assistance, and for enforcement to abate pollution of interstate or navigable water, the Federal Water Pollution Control Act defines the Federal role and responsibility in preventing and controlling water pollution. Its authorized programs for the protection of our water supplies are vital to our Nation.

The 1961 amendments (Public Law 87-88) directed to transfer to the Secretary of Health, Education, and Welfare of the responsibility for the act's administration formerly vested in the Surgeon General

of the Public Health Service. Through delegations of the Secretary's authority, the operating programs have continued to be administered in the Public Health Service.

In the field of water pollution the Public Health Service has made a major contribution to our understanding of the nature of water pollution, its effect on individuals, and appropriate measures of pollution control. The basic orientation of the Public Health Service, however, is toward cooperative health programs with the States.

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The Public Health Service is not oriented toward the broader problems associated with the conservation of waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other uses.

The public Health Service should be free to concentrate on its primary concern with health, in the water pollution field, as it is in other areas. At the same time, the administration of the water pollution control program should not be subordinated to considerations which are important to the Public Health Service but are not directly related to the sound application of this act.

The committee therefore endorses the establishment of a Federal Water Pollution Control Administration which would have specific responsibility for comprehensive programs; interstate cooperation and uniform laws; enforcement measures to abate pollution and to establish and obtain compliance with standards of water quality; and to control pollution from Federal installations. Other functions relating to water pollution are retained within the Secretary's discretion who may additionally assign them to the new Administration or to other sectors in the Department. The committee is confident that the Secretary will permit no duplication or overlapping in the water pollution control program.

However, the committee believes that the Administration should not be limited to those elements of the program which make it possible to achieve enforcement, but should have operational aspects that encourage compliance as well. Enforcement powers should be used but compliance should be sought.

Cooperative assignment of commissioned officer staff of the Public Health Service to performance of duties with other Federal agencies, as for example, the Bureau of Prisons, the U.S. Coast Guard, the Bureau of Employees' Compensation, and many other agencies is a traditional Public Health Service function, of which it is justifiably proud. The temporary assignment of commissioned corps personnel to accompany the transfer or responsibilities to the Federal Water Pollution Control Administration is in full accord with this long-

standing practice. It will provide as well for continuing utilization of their developed technical competencies in water pollution control.

*Additional Assistant Secretary*

The committee also recognizes the need for additional assistance to the Secretary in administering the act and accordingly recommends the creation of an additional position of Assistant Secretary in the Department to oversee this important sphere of activities.

The Department of Health, Education, and Welfare, although the newest in the family of Cabinet-rank agencies, is second only to the Department of Defense in the complexity of its program responsibilities and fifth in size in number of personnel. The emergence of the Department as a major water resources agency as a result of its responsibilities under the Federal Water Pollution Control Act has substantially increased the burdens imposed on its central administration.

The new post of Assistant Secretary will have the same status in all respects as those now existing. It will be left to the Secretary whether to vest the administration functions under this bill in the occupant of the new position or to assign them to an existing Assistant Secretary. The Secretary may, as he sees fit, distribute, or redistribute the func-

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tions of the Assistant Secretaries provided that a single Assistant Secretary supervises and directs both the Federal Water Pollution Control Administration and the administration of all functions within the Department related to water pollution.

GRANTS FOR RESEARCH AND DEVELOPMENT—COMBINED SEWER SYSTEMS

The magnitude of the problem of pollution caused by combined sewers impressed the committee with the necessity for action in reducing this source of pollution. Combined storm and sanitary sewers in many of the Nation's older municipalities seriously aggravate the national pollution situation. The use of combined and sanitary sewers is an outgrowth of the provision initially for disposal of storm water within urban areas. As more and more homes and business establishments were provided with water connections and water was used for conveyance and disposal of water it was concluded that sewer lines could serve a multiple purpose and sanitary waste disposal connections were made to these systems. This arrangement actually produced considerable detrimental effect. During periods of storm water runoff, even in small amounts, the sewers discharge flows of storm water and sanitary sewage in excess of the capacity of treatment plants. Thus, it is impossible to treat

all effluent and much untreated waste is bypassed into receiving waters creating a situation that is worse than discharging all storm water runoff into receiving waters in an untreated state.

It has been determined that there are 1,131 communities whose entire waste collection systems are of the combined sewer type serving a population of 20.9 million and that another 810 cities of 37.8 million population have systems which partially consist of combined sewers.

In a selected sample of 95 communities with combined sewer systems, either total or partial, 45 communities indicate some degree of plan preparation for proceeding to take measures to deal with their individual problems. The research and development grants herein authorized are needed to assist these and other municipalities in pointing out practical, efficient, and economic methods for resolving this problem.

Complete separation of the combined storm and sanitary sewers would entail estimated expenditures of up to \$30 billion. Alternative measures, some of which were discussed by witnesses during the public hearings, would appear to present a feasible and in some instances a preferable answer. Accordingly, the committee recommends an authorization for research and development grants to demonstrate new or improved methods to eradicate this problem in the amount of \$20 million annually for the fiscal year ending June 30, 1965, and for the next 3 succeeding fiscal years. The amount of any single grant is limited to 5 percent of the total amount authorized for any one fiscal year.

The committee expects these funds to be used for the purpose of assisting communities in devising and carrying forward projects which would illustrate or demonstrate improved means, including separation of combined sewers, whereby the discharge of effluents from combined sewer systems can be controlled and disposed of without deleterious effects to our water resources. Research as such is needed to suggest pollution abatement procedures and practices. However, there is no

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substitute for full-scale demonstrations to point the way for eliminating these intermittent slugs of excessive pollution.

#### TREATMENT PLANT CONSTRUCTION GRANTS

The present program of grants for construction of municipal waste treatment plants provides for a Federal grant of 30 percent of estimated cost of construction but not to exceed \$600,000 for a single project and \$2,400,000 for a joint multimunicipal project. This pro-

gram has been markedly successful in stimulating action on the part of the smaller communities.

Larger municipalities, whose needed facilities are of necessarily greater size, encounter appreciably greater expenditures. The rising costs of sewage treatment plant construction have placed additional burdens on the larger communities. The share of assistance provided under existing dollar ceiling limitations falls proportionately short of being an effective incentive in view of their correspondingly larger expenses.

Approximately 45 percent of the population, whose waste treatment facilities needs are still unmet, is found in these larger communities. The committee recognizes the need to increase these allowances to meet higher costs, to furnish a more adequate incentive and more equitable share of assistance for the larger municipalities and recommends that they be increased to \$1 million for individual projects and to \$4 million for joint projects.

It has been urged that the individual and joint project authorization increases provided in this bill do not represent a fair share of the overwhelming cost burdens imposed on our larger cities. The committee is also aware of the fiscal burdens being imposed on smaller communities whose pollution abatement programs require the construction of collection sewers, which are not eligible for financial assistance under the Water Pollution Control Act, as well as interceptor sewers and sewage treatment plants. However, the committee did not feel it could provide additional authorizations within the program unless it approved substantial increases in the total sewage treatment grant authorizations.

It is the intention of the committee to give early and thorough attention to the financial and technological problems confronting communities, large and small, as they endeavor to control and abate municipal sewage. The committee is confident that out of the experience we have gained under the present act and from information derived from hearings and technical studies it will be able to develop a sound and expanded program of pollution control and abatement grants designed to meet realistic goals of water quality enhancement.

#### URBAN PLANNING

Comprehensive metropolitan planning assumes increasing significance and has become essential in view of our rapid urbanization. Desirable patterns of orderly development of municipal areas must be planned and followed to eliminate factors which lead to the breeding of slum and blight-impacted areas and to effect those sizeable economies and efficiencies ordinarily made possible through the coordination of common interests and needs. The committee considers

that it is appropriate to allow a 10-percent increase in the grants authorized for treatment plant construction where such planning is carried forward.

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*Enforcement where interstate commerce is affected*

The committee feels that, because of the serious health and economic effects of pollution on shellfish, the Secretary should be authorized and directed to institute enforcement proceedings on his own initiative to abate pollution of interstate or navigable waters which prevents such products from being entered into interstate commerce.

Under the cooperative program for certification of interstate shellfish shippers, the Public Health Service, in cooperation with State and local governments and shellfish industry, has developed an effective barrier to the transportation and sale in interstate commerce of shellfish, such as clams, oysters, and mussels, not meeting approved sanitary standards. State governments certify interstate shippers who obtain shellfish from areas meeting the sanitary standards of the Public Health Service. The Public Health Service maintains and publishes a list of approved certificated shippers. In order to keep its shippers on the Public Health Service approved list, States must close and patrol harvesting areas found unsatisfactory by the Public Health Service.

In such circumstances, the Federal responsibility to enforce the abatement of the pollution is clearly recognizable. The necessary ban on introduction of such pollution-affected products in interstate commerce and the foreclosure of gathering and harvesting operations in these waters effectively denies the means of livelihood and gainful employment to the concerned party. The injured person, who must sustain untoward economic losses through no fault of his own, has no direct recourse against the polluters. Measures to restore the harvesting of shellfish in such waters are hampered and rendered ineffective by the continuance of the pollution. Federal enforcement powers would be made available to provide that pollution sources are abated and restorative measures allowed to proceed more promptly and effectively.

The existing act authorizes enforcement measures to abate pollution which endangers the health or welfare of any persons. It specifically directs the application of enforcement measures on Federal responsibility and initiative when pollution of an interstate nature; i.e., originating in one State and endangering the health and welfare of persons in another State or States, is occurring. Extension of this authority to require enforcement action when any person is pre-

vented from marketing shellfish or shellfish products in interstate commerce because of pollution and action of Federal, State, or local authorities is equally necessary.

#### STANDARDS OF WATER QUALITY

Increasing population and expanding industrialization are placing growing demands on our limited sources of water. It will be necessary for us to use many rivers for multiple purposes, including industrial, agricultural, recreational, public water supply, and fish and wildlife uses. In other cases, the uses on a given river or portion of a river will be more limited, depending upon the nature of the waterway, the intensity and history of use, and alternative sources of water in the area. Economic, health, esthetic, and conservation values which contribute to the social and economic welfare of an area must be taken into account in determining the most appropriate use or uses of a

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stream. There ought to be a constant effort to improve the quality of the water supply, it being recognized that the improvement of the quality of water makes it available for more uses.

The correction of damaging pollution after it has built up is vastly more complex and costly than prevention of such buildups. Standards of water quality to provide reliable and sound guidelines and effective measuring devices are an important and necessary part of any program of water pollution prevention, abatement, and control. The bill herewith reported would provide a basis for preventive action and a clear understanding of pollution abatement and control requirements by authorizing the establishment of water quality standards.

Water quality standards would provide an engineering base for design of treatment works by municipalities and industries. Such standards would enable municipalities and industries to develop realistic plans for new plants or expanded facilities, without uncertainties about waste disposal requirements on interstate waters.

While this would be a new provision in Federal legislation, it is by no means a new concept. Water quality standards have been utilized successfully by individual States for streams within their boundaries, and in a few interstate situations.

Accordingly, the bill provides authority for the Secretary to establish standards of water quality to be applicable to interstate waters or portions thereof. The standards are to be formulated in accordance with accepted administrative procedures calling for notice and public hearing and consultation with affected Federal, State, inter-

state, and local interests and are to be such as to protect the public health or welfare and to enhance the quality and value of interstate waters. Standards would also be subject to revision either by the Secretary on his own or when petitioned to do so by the Governor of any affected State. The same procedure for hearing and consultation would be followed in revisions as when standards were being formulated.

The Secretary is directed to promulgate the standards only if following his request the appropriate State and interstate agencies have not developed standards which he finds consistent with the bill's provisions. Once the Secretary has promulgated water quality standards, or if there are standards established by State or interstate agencies consistent with the act, any discharge of matter which reduces the quality of the waters below the established standards is made subject to abatement under the present enforcement procedures provided in the act; i.e., conference, public hearing, and court action. The court, in receiving evidence, shall give due consideration to the practicability of complying with the applicable standards.

During the course of the hearings on S. 649, 88th Congress, and again in the hearing on S. 4, certain industrial representatives raised questions about the effect of standards on enforcement proceedings and the power of the enforcement conference and hearing board to review the standards established by the Secretary. The committee wishes to make its position on this question perfectly clear.

Water quality standards are not designed for use primarily as an enforcement device; they are intended to provide the Secretary and State and local agencies with additional tools for objective and clear public policy statements on the use or uses to which specific segments of interstate waters may be put. Their principal objective is the orderly development and improvement of our water resources without

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the necessity of adversary proceedings which inevitably develop in enforcement cases.

The authority given the Secretary is not arbitrary. He is constrained from arbitrary action by the public hearing and consultation requirements of the standards section and by the knowledge that, if he promulgates standards, compliance with such standard must ultimately meet the test of "practicability" in the courts, as provided in section 5(d) of the bill, should violation of such standards trigger an enforcement action. It is clear, also, that the enforcement conference and the hearing board must, in the light of the authority given the court, consider the "practicability" of compliance with the standards.



It is not the province of the conference, the hearing board, or the court to revise the standards in the course of an enforcement proceeding, since it is not the standards but abatement orders consistent with such standards which are enforceable. It is the intent of the committee that in the event the conference, the hearing board or the court finds compliance with the standards impracticable the Secretary should take steps to consider revision of the standards.

The committee must reemphasize its intent that water quality standards are not designed to "lock in" present uses of water or to exclude other uses, not now possible. The standards are not a device to insure the lowest common denominator of water quality but to enhance the quality and productivity of our water resources.

The committee is convinced that water quality standards can contribute to an orderly development of water supplies and the judicious use of such supplies. The committee recognizes that the establishment of water quality standards is not a simple task and that it will require close coordination between Federal, State, interstate, and local agencies having responsibility in this field. It is anticipated that the establishment of standards will tend to reduce the need for abatement enforcement proceedings since full knowledge would be available as to the standards of water quality.

The committee expects that a determination would be made of present quantities of water available and the condition of such water on a case-by-case basis. The determinations should be made by areas and subareas.

The committee intends that water quality standards should be applied on the basis of the water quality requirements of present and future uses of a stream or section of stream, after due consideration of all factors and variables involved.

The committee also intends that the present law should continue to be operative with respect to actions authorized to be taken where the health or welfare or persons is endangered by pollution. It is not intended that current water pollution abatement procedures or actions should be held in abeyance pending the establishment of standards. In addition, the bill clearly states that the authority to establish standards does not extend the jurisdiction of the Secretary over waters not covered in the basic act.

Where the Congress has established multistate compacts such as the Delaware River Basin compact with authority to establish standards of water quality it is not the intent of the committee that the Secretary's authority supplant that of the compact commission. Rather the authority in this measure to set standards should be held in reserve, for use only if the commission fails in its responsibilities.

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## ACCOUNTABILITY OF FINANCIAL ASSISTANCE

In view of the proposed increases in grant programs, the committee believes that it would be appropriate that a system of audits be provided to assure that grant funds are used for the purpose intended. Accordingly, provisions to accomplish this have been included.

## LABOR STANDARDS ENFORCEMENT

The existing Water Pollution Control Act provides that all of the provisions of the Davis-Bacon Act shall be met in connection with the construction of waste treatment works for which Federal grants are made. However, the committee is of the opinion that in order to carry out the full effect of such law, it is desirable that the Secretary of Labor carry out the procedures set forth in Reorganization Plan No. 14 of 1950. This plan provides that in order to insure coordination of administration and consistency of enforcement of labor standards the Secretary of Labor shall prescribe appropriate standards, regulations, and procedures, which shall be observed by other Federal agencies responsible for construction.

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INDIVIDUAL VIEWS OF SENATOR  
JOHN SHERMAN COOPER

At the outset, I would like to say that the Subcommittee on Air and Water Pollution of the Committee on Public Works, under the chairmanship of Senator Muskie of Maine and the minority leadership of Senator Boggs, of Delaware, has performed a valuable service in demonstrating the necessity of more effective water pollution policies and programs, and in presenting legislation with the objective of strengthening the control and abatement of water pollution. The bill presented to the Senate provides a new concept as far as legislative action is concerned for the prevention of water pollution. It is the establishment by the Secretary of Health, Education, and Welfare of "water quality standards" for interstate waters and portions thereof. Although many witnesses testified that it would be very difficult to establish such standards, I find no reason to oppose this new concept if States, municipalities, interstate water agencies acting under compact, industries and other interested parties are assured by proper procedures the right to adequately present their views and to appeal to the courts if necessary for a determination as to whether the standards fixed by the Secretary meet the criteria established in the pending bill.

Criteria under which the Secretary is directed to establish water quality standards are as follows:

SEC. 10(c) (3) Such standards of quality shall be such as to protect the public health and welfare and serve the purposes of this Act. In establishing standards designed to enhance the quality of such waters, the Secretary shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

In 1963, I opposed S. 649, passed by the Senate, a bill almost identical with S. 4, because it did not provide an effective voice to the states and other parties affected in the consideration and development of water quality and standards.

S. 4, as reported, does provide that the Secretary shall consult with Federal agencies, State and interstate water pollution control agencies, and with municipalities and interested parties involved, before preparing water quality regulations. It also provides that public hearings shall be held thereafter upon petition of the Governor of any State affected to consider revision of such standards. It also provides that the States shall be given an opportunity to develop standards before the Secretary promulgates standards. But I make the essential point, that even with these procedures, ultimate authority is fixed in the Secretary and the Secretary alone to promulgate water quality standards. The only limitations provided by the committee bill are those of consultation with the States and other interested parties, the

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opportunity to present views in public hearings, and the choice provided the States of developing water quality standards, but only standards consistent with, if not identical with, the standards the Secretary has prescribed.

In considering the broad powers given to the Secretary, it is necessary to keep in mind that S. 4 authorizes him to promulgate standards under section 10(c) (3) requiring the zoning of interstate waters or portions thereof for agricultural, industrial, recreational, and other legitimate uses. The Secretary's authority to zone was recognized and testified to by Senator Muskie, the manager of the bill, in our hearings in July 1963.

It is my view that such broad powers given to an official of the Federal Government are broader powers, in my opinion, than those given to any agency or individual other than the President of the United States. I hold that the States and other interested parties should be provided the right to appeal to the courts if the Secretary abuses his vast power. This is not a question of States rights—it is a question of justice and the right of interested parties to be heard

and to receive the protection of the courts.

For this purpose, I proposed an amendment in the committee to assure (1) adequate publication and notice to the States of the regulations which the Secretary made available. This is important because it is impossible for the States and interested parties to propose any rational revisions without knowing the exact standards developed by the Secretary. (2) After publication of the proposed standards the States and interested parties would upon application be assured a public hearing. It is important to note that, unlike the stage of consultation prior to the issuance of the proposed regulations, the interested parties have before them a definite regulation in specific detail. We must bear in mind that it is one thing to be consulted in the formulation of a regulation, but it is quite another matter to be afforded a full opportunity to be heard after the regulations have been crystallized. After the interested parties have been given a full opportunity to be heard, the Secretary is required to make a report of his findings of fact and his conclusions with respect to the issues involved. In reviewing the record and his report, the Secretary may then affirm, rescind or modify, in whole or in part, his proposed regulations. (3) The right of appeal to a U.S. circuit court. The language of this section is taken verbatim from section 5(g) (2) of the present law which affords any State or interstate agency the right to a court review of the Secretary's decision of approving or disapproving a plan for the prevention and control of water pollution submitted by any of these agencies. (4) My amendment requires the Secretary to postpone the effective date of his regulations so as to allow the appropriate State and interstate agencies adequate time to adopt standards consistent with those prescribed by the Secretary.

The Federal Water Pollution Control Act provides in several sections that, "it is hereby declared to be the policy of Congress to recognize, preserve, and protect the primary responsibilities of the States in preventing and controlling water pollution." The task of construction of pollution control facilities—Federal, State, municipal, and private—is immense. The Public Health Service has estimated that the annual cost of collecting and treating municipal sewage in the continental United States would increase from \$476.5 million in

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1954 to \$817.6 million in 1980. The majority report in 1963 stated that the separation of storm and sanitary sewers would entail an expenditure of \$8 billion. Considering the expressed policy of the act that the States' primary responsibility for water pollution control be preserved, the necessity of the full cooperation of the Federal Govern-

ment, States, municipalities, and private persons in constructing the vast facilities that will be needed for pollution control, and considering further that the bill before us would provide to the Secretary authority to zone rivers and to determine their further use, I argue strongly that the minimum procedures which my amendment would secure—the provision of adequate hearings before and after promulgation of standards, a minimum review by the U.S. courts of appeal, which could only be directed to an abuse of the Secretary's authority, are required.

It will be argued, as it was in the committee, that the enforcement procedures of the present act enumerated in section 8 provide this protection. I am sure that it does not do so. Section 10 prescribes enforcement procedures, directed only to the abatement of pollution. If this legislation is enacted, the hearing board provided for by section 8 would be limited to considering whether any discharge in interstate water or reaching interstate water had lowered the quality standards prescribed by the Secretary, and whether the measures proposed by the Secretary for its correction were practical and feasible. The review by the court under this section could only apply to the record made by the hearing board and to the Secretary's findings. My amendment is distinguishable because it would provide for a court review of the quality standards themselves.

During the hearings conducted by the Senate Public Works Subcommittee in 1963 in which 6 days of hearings were held, no Governors were heard, and the majority of representatives of State agencies who testified opposed the water quality standards section of the bill. They are as follows:

- (1) State and Interstate Water Pollution Control Administrators.
- (2) Ohio River Valley Sanitation Commission.
- (3) Interstate Sanitation Commission (New York, New Jersey, Connecticut).
- (4) Conservation and Management of Natural Resources Committee, National Association of Manufacturers.
- (5) Michigan Water Resources Commission.
- (6) Mayor, city of Detroit.
- (7) Mississippi Valley Association.
- (8) American Farm Bureau Federation.
- (9) Interstate Conference on Water Problems and Council of State Governments.
- (10) Missouri Water Pollution Board.
- (11) New England Interstate Water Pollution Control Commission.

The Senate passed the bill by a large vote. When it went to the

House of Representatives much more extensive hearings were held by a larger committee—the House Committee on Public Works on December 4, 5, 6, 9, and 10, 1963, and February 4, 5, 6, 7, 17, 18, and 19, 1964. When full opportunity was given by the House committee to the Governors and State water pollution control agencies to testify,

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they were practically unanimous in opposing the water quality standards in S. 649, now retained in S. 4 before the Senate. The following Governors and representatives of State and interstate agencies and some local business organizations either testified or filed statements in opposition to the standards section of the bill:

- (1) Delaware Water Pollution Commission.
- (2) Texas Water Pollution Control Board.
- (3) Alabama Water Improvement Commission.
- (4) Water Pollution Control Federation.
- (5) Tennessee Stream Pollution Control Board, Nashville, Tenn.
- (6) American Association of Professors of Sanitary Engineering.
- (7) Florida State Board of Health.
- (8) Kansas Department of Health.
- (9) State of New York Water Resources Commission.
- (10) Izaak Walton League of America.
- (11) Kentucky State Water Pollution Control Commission.
- (12) Kentucky Department of Health.
- (13) Association of State and Territorial Health Officers.
- (14) North Carolina State Stream Sanitation Committee.
- (15) Pennsylvania State Health Department.
- (16) Interstate Conference on Water Problems, Council of State Governments.
- (17) American Society of Civil Engineers.
- (18) Wisconsin attorney general.
- (19) Governor of Maryland.
- (20) Arkansas Water Pollution Control Commission.
- (21) Associated Industries of New York State, Inc.
- (22) Association of State and Interstate Water Pollution Control Administrations.
- (23) California Water Pollution Control Association.
- (24) Interstate Conference on Water Problems, Chicago, resolution IV.
- (25) Kansas Engineering Society.
- (26) Maine Water Improvement Commission.
- (27) Middlesex County (New Jersey) Sewerage Authority.
- (28) Governor of Maine.
- (29) Nebraska State Department of Health.

- (30) New England Interstate Water Pollution Control Commission.
- (31) New Hampshire Water Pollution Commission.
- (32) New York State Water Resources Commission.
- (33) Oklahoma State Department of Health.
- (34) Oregon State Board of Health.
- (35) Texas State Board of Health.
- (36) Temporary State Commission on Water Resources (New York).
- (37) Missouri Water Pollution Board.
- (38) Rhode Island Department of Health.
- (39) Texas Water Pollution Control Board.
- (40) Utah Public Health Association.
- (41) Virginia State Water Control Board.
- (42) Governor of Oregon.
- (43) Mayor of Kansas City, Mo.
- (44) South Dakota State Department of Health.

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When the committee made its report, it amended the Senate bill and refused to accept the Senate version, in the following terms:

*Recommended standards of water quality*

The desirability of having water quality standards is recognized by the committee, but the committee is also conscious of the fact that any attempt to authorize the promulgation of such standards by an agency of the Federal Government might do damage to the cooperative Federal-State relationships. For that reason, the committee has modified the provision of section 5 of the bill as passed by the Senate to provide that the Secretary instead of promulgating standards may recommend standards. The committee considers this to be a major change to assure the States, the various water pollution control organizations and private industry that the Federal Government does not desire to have an arbitrary establishment of such standards. The bill as amended now provides sufficient guarantees to all those concerned that the adoption of the recommendations of the Secretary will be at the option of the States. The committee is of the opinion that the amended language in the bill is a definite improvement to existing legislation and will furnish a better framework to carry out the purposes of the program.

\* \* \* \* \*

Fourth, the new subsection (c) of section 10 of the Federal

Water Pollution Control Act which is proposed to be added by the bill has been amended to remove from the Secretary authority to promulgate standards of water quality and in place thereof the Secretary has been granted authority to make recommendations for these water quality standards with the further limitation that no such standard may be enforced under the act unless it has been adopted by the Governor or State water pollution control agency of each affected State.

The new subsection (c) of section 10 proposed by the House committee is as follows:

(c) (1) In order to carry out the purposes of this Act, the Secretary may, after consultation with officials of the State and interstate water pollution control agencies and other Federal agencies involved and with due regard for their proposals, prepare recommendations for standards of water quality to be applicable to interstate waters or portions thereof. The Secretary's recommendations shall be made available to any conference which may be called pursuant to subsection (d) (1) of this section, and to any Hearing Board appointed pursuant to subsection (f) of this section; and all or any part of such standards may be included in the report of said conference or in the recommendations of said Hearing Board.

(2) The Secretary shall, when petitioned to do so by the Governor of any State subject to or affected by the water quality standards recommendations, or when in his judgment it is appropriate, consult with the parties enumerated in

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paragraph (1) of this subsection concerning a revision in such recommended standards.

(3) Such recommended standards of quality shall be such as to protect the public health and welfare and serve the purposes of this Act. In establishing recommended standards designed to enhance the quality of such waters, the Secretary shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

(4) The Secretary shall recommend standards pursuant to this subsection with respect to any waters only if, within a reasonable time after being requested by the Secretary to do



so, the appropriate States and interstate agencies have not developed standards found by the Secretary to be consistent with paragraph (3) of this subsection and applicable to such interstate waters or portions thereof.

(5) No standard of water quality recommended by the Secretary under this subsection shall be enforced under this Act unless such standard shall have been adopted by the Governor or the State water pollution control agency of each affected State.

The House did not take action on S. 649. The recommendations of the House Committee on Public Works are much more stringent than the amendment that I propose. The House denied to the Secretary the authority to promulgate water quality standards, giving him the authority only to recommend standards to the States and no standards could be enforced unless adopted first by the Governor or State agency. As I have stated, my amendment would not deny him the authority to formulate standards but would assure to the States and interested parties that their views would be heard, and that they would have recourse to the Circuit Court of Appeals against any abuses of his power. I submit this is the minimum that should be done.

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[NOTE: p. 18 is blank.]

#### CHANGES IN EXISTING LAW

In compliance with subsection 4 of rule XXIX of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

#### FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED

[33 U.S.C. 466-466k]

AN ACT To provide for water pollution control activities in the Public Health Service of the Department of Health, Education, and Welfare, and for other purposes

#### DECLARATION OF POLICY

SECTION 1. (a) *The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution.*

[(a)] (b) In connection with the exercise of jurisdiction over the waterways of the Nation and in consequence of the benefits resulting

to the public health and welfare by the prevention and control of water pollution, it is hereby declared to be the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States in preventing and controlling water pollution, to support and aid technical research relating to the prevention and control of water pollution, and to provide Federal technical services and financial aid to State and interstate agencies and to municipalities in connection with the prevention and control of water pollution. [To this end, the Secretary of Health, Education, and Welfare (hereinafter in this Act called the "Secretary") shall administer this Act.] *The Secretary of Health, Education, and Welfare (hereinafter in this Act called the "Secretary") shall administer this Act and, with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him, shall supervise and direct the head of the Water Pollution Control Administration created by section 2 and the administration of all other functions of the Department of Health, Education, and Welfare related to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe.*

[(b)] (c) Nothing in this Act shall be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.

#### FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

SEC. 2. *Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the "Administration"). The head of the Administra-*

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*tion shall be appointed, and his compensation fixed, by the Secretary, and shall, through the Administration, administer sections 3, 4, 10, and 11 of this Act and such other provisions of this Act as the Secretary may prescribe. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge the Administration's functions and may for that purpose use funds available for carrying out such functions.*

#### COMPREHENSIVE PROGRAMS FOR WATER POLLUTION CONTROL

[SEC. 2.] SEC. 3. (a) The Secretary shall, after careful investigation, and in cooperation with other Federal agencies, with State

water pollution control agencies and interstate agencies, and with the municipalities and industries involved, prepare or develop comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters. In the development of such comprehensive programs due regard shall be given to the improvements which are necessary to conserve such waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses. For the purpose of this section, the Secretary is authorized to make joint investigations with any such agencies of the condition of any waters in any State or States, and of the discharges of any sewage, industrial wastes, or substance which may adversely affect such waters.

(b) (1) In the survey or planning of any reservoir by the Corps of Engineers, Bureau of Reclamation, or other Federal agency, consideration shall be given to inclusion of storage for regulations of streamflow for the purpose of water quality control, except that any such storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source.

(2) The need for and the value of storage for this purpose shall be determined by these agencies, with the advice of the Secretary, and his views on these matters shall be set forth in any report or presentation to the Congress proposing authorization or construction of any reservoir including such storage.

(3) The value of such storage shall be taken into account in determining the economic value of the entire project of which it is a part, and costs shall be allocated to the purpose of water quality control in a manner which will insure that all project purposes share equitably in the benefits of multiple-purpose construction.

(4) Costs of water quality control features incorporated in any Federal reservoir or other impoundment under the provision of this Act shall be determined and the beneficiaries identified and if the benefits are widespread or national in scope, the costs of such features shall be nonreimbursable.

#### INTERSTATE COOPERATION AND UNIFORM LAWS

[SEC. 3.] SEC. 4. (a) The Secretary shall encourage cooperative activities by the States for the prevention and control of water pollution; encourage the enactment of improved and, so far as practicable, uniform State laws relating to the prevention and control of

water pollution; and encourage compacts between States for the prevention and control of water pollution.

(b) The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for (1) cooperative effort and mutual assistance for the prevention and control of water pollution and the enforcement of their respective laws relating thereto, and (2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements and compacts. No such agreement or compact shall be binding or obligatory upon any State a party thereto unless and until it has been approved by the Congress.

[SEC. 4.] SEC. 5. (a) The Secretary shall conduct in the Department of Health, Education, and Welfare and encourage, cooperate with, and render assistance to other appropriate public (whether Federal, State, interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, control, and prevention of water pollution. In carrying out the foregoing, the Secretary is authorized to—

(1) collect and make available, through publications and other appropriate means, the results of and other information as to research, investigations, and demonstrations relating to the prevention and control of water pollution, including appropriate recommendations in connection therewith;

(2) make grants-in-aid to public or private agencies and institutions and to individuals for research or training projects and for demonstrations, and provide for the conduct of research, training, and demonstrations by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes;

(3) secure from time to time and for such periods as he deems advisable, the assistance and advice of experts, scholars, and consultants as authorized by section 15 of the Administrative Expenses Act of 1946 (5 U.S.C. 55a);

(4) establish and maintain research fellowships in the Department of Health, Education, and Welfare with such stipends and allowances, including traveling and subsistence expenses, as he may deem necessary to procure the assistance of the most promising research fellowships:

*Provided*, That the Secretary shall report annually to the appropriate committees of Congress on his operations under this paragraph; and

(5) provide training in technical matters relating to the causes, prevention, and control of water pollution to personnel of public agencies and other persons with suitable qualifications.

(b) The Secretary may, upon request of any State water pollution control agency, or interstate agency, conduct investigations and research and make surveys concerning any specific problem of water pollution confronting any State, interstate agency, community,

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municipality, or industrial plant, with a view of recommending a solution of such problem.

(c) The Secretary shall, in cooperation with other Federal, State, and local agencies having related responsibilities, collect and disseminate basic data on chemical, physical, and biological water quality and other information insofar as such data or other information relate to water pollution and the prevention and control thereof.

(d) (1) In carrying out the provisions of this section the Secretary shall develop and demonstrate under varied conditions (including conducting such basic and applied research, studies, and experiments as may be necessary):

(A) Practicable means of treating municipal sewage and other waterborne wastes to remove the maximum possible amounts of physical, chemical, and biological pollutants in order to restore and maintain the maximum amount of the Nation's water at a quality suitable for repeated reuse;

(B) Improved methods and procedures to identify and measure the effects of pollutants on water uses, including those pollutants created by new technological developments; and

(C) Methods and procedures for evaluating the effects on water quality and water uses of augmented streamflows to control water pollution not susceptible to other means of abatement.

(2) For the purposes of this subsection there is authorized to be appropriated not more than \$5,000,000 for any fiscal year, and the total sum appropriated for such purposes shall not exceed \$25,000,000.

(e) The Secretary shall establish, equip, and maintain field laboratory and research facilities, including, but not limited to, one to be located in the northeastern area of the United States, one in the Middle Atlantic area, one in the southeastern area, one in the midwestern area, one in the southwestern area, one in the Pacific Northwest, and one in the State of Alaska, for the conduct of research, investigations, experiments, field demonstrations and studies, and training relating to the prevention and control of water pollution. Insofar as practicable, each such facility shall be located near institutions of higher

learning in which graduate training in such research might be carried out.

(f) The Secretary shall conduct research and technical development work, and make studies, with respect to the quality of the waters of the Great Lakes, including an analysis of the present and projected future water quality of the Great Lakes under varying conditions of waste treatment and disposal, an evaluation of the water quality needs of those to be served by such waters, an evaluation of municipal, industrial, and vessel waste treatment and disposal practices with respect to such waters, and a study of alternate means of solving water pollution problems (including additional waste treatment measures) with respect to such waters.

#### GRANTS FOR RESEARCH AND DEVELOPMENT

*SEC. 6. The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which*

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*carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith.*

*Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary; (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes.*

*There are hereby authorized to be appropriated for the fiscal year ending June 30, 1965, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose of making grants under this section. Sums so appropriated shall remain available until expended. No grant shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year.*

## GRANTS FOR WATER POLLUTION CONTROL PROGRAMS

[SEC. 5.] SEC. 7. (a) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1961, \$3,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000, for grants to States and to interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution.

(b) The portion of the sums appropriated pursuant to subsection (a) for a fiscal year which shall be available for grants to interstate agencies and the portion thereof which shall be available for grants to States shall be specified in the Act appropriating such sums.

(c) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to the several States, in accordance with regulations, on the basis of (1) the population, (2) the extent of the water pollution problem, and (3) the financial need of the respective States.

(d) From each State's allotment under subsection (c) for any fiscal year the Secretary shall pay to such State an amount equal to its Federal share (as determined under subsection (h)) of the cost of carrying out its State plan approved under subsection (f), including the cost of training personnel for State and local water pollution control work and including the cost of administering the State plan.

(e) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to interstate agencies, in accordance with regulations, on such basis as the Secretary finds reasonable and equitable. He shall from time to time pay to each such agency, from its allotment, an amount equal to such portion of the cost of carrying out its plan approved under subsection (f) as may be determined in accordance with regulations, including the cost of training personnel for water pollution control work and including the

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cost of administering the interstate agency's plan. The regulations relating to the portion of the cost of carrying out the interstate agency's plan which shall be borne by the United States shall be designed to place such agencies, so far as practicable, on a basis similar to that of the States.

(f) The Secretary shall approve any plan for the prevention and control of water pollution which is submitted by the State water pollution control agency, or, in the case of an interstate agency, by such agency, if such plan—

(1) provides for administration or for the supervision of ad-

ministration of the plan by the State water pollution control agency or, in the case of a plan submitted by an interstate agency, by such interstate agency;

(2) provides that such agency will make such reports, in such form and containing such information, as the Secretary may from time to time reasonably require to carry out his functions under this Act;

(3) sets forth the plans, policies, and methods to be followed in carrying out the State (or interstate) plan and in its administration;

(4) provides for extension or improvement of the State or interstate program for prevention and control of water pollution;

(5) provides such accounting, budgeting, and other fiscal methods and procedures as are necessary for the proper and efficient administration of the plan; and

(6) sets forth the criteria used by the State in determining priority of projects as provided in section [6(b)(4)] 8(b)(4).

The Secretary shall not disapprove any plan without first giving reasonable notice and opportunity for hearing to the State water pollution control agency or interstate agency which has submitted such plan.

(g) (1) Whenever the Secretary, after reasonable notice and opportunity for hearing to a State water pollution control agency or interstate agency finds that—

(A) the plan submitted by such agency and approved under this section has been so changed that it no longer complies with a requirement of subsection (f) of this section; or

(B) in the administration of the plan there is a failure to comply substantially with such a requirement.

the Secretary shall notify such agency that no further payments will be made to the State or to the interstate agency, as the case may be, under this section (or in his discretion that further payments will not be made to the State, or to the interstate agency, for projects under or parts of the plan affected by such failure) until he is satisfied that there will no longer be any such failure. Until he is so satisfied, the Secretary shall make no further payments to such State, or to such interstate agency, as the case may be, under this section (or shall limit payments to projects under or parts of the plan in which there is no such failure).

(2) If any State or any interstate agency is dissatisfied with the Secretary's action with respect to it under this subsection, it may appeal to the United States court of appeals for the circuit in which such State (or any of the member States, in the case of an interstate agency) is located. The summons and notice of appeal may be served at any place in the United States. The findings of fact by



the Secretary, unless contrary to the weight of the evidence, shall

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be conclusive; but the court, for good cause shown, may remand the case to the Secretary to take further evidence, and the Secretary may thereupon make new or modified findings of fact and may modify his previous action. Such new or modified findings of fact shall likewise be conclusive unless contrary to the weight of the evidence. The court shall have jurisdiction to affirm the action of the Secretary or to set it aside, in whole or in part. The judgment of the court shall be subject to review by the Supreme Court of the United States upon certiorari or certification as provided in title 28, United States Code, section 1254.

(h) (1) The "Federal share" for any State shall be 100 per centum less than percentage which bears the same ratio to 50 per centum as the per capita income of such State bears to the per capita income of the United States, except that (A) the Federal share shall in no case be more than  $66\frac{2}{3}$  per centum or less than  $33\frac{1}{3}$  per centum, and (B) the Federal share for Puerto Rico and the Virgin Islands shall be  $66\frac{2}{3}$  per centum.

(2) The "Federal shares" shall be promulgated by the Secretary between July 1 and September 30 of each even-numbered year, on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce. Such promulgation shall be conclusive for each of the two fiscal years in the period beginning July 1 next succeeding such promulgation: *Provided*, That the Federal shares promulgated by the Secretary pursuant to section 4 of the Water Pollution Control Act Amendments of 1956, shall be conclusive for the period beginning July 1, 1956, and ending June 30, 1959.

(3) As used in this subsection, the term "United States" means the fifty States and the District of Columbia.

(4) Promulgations made before satisfactory data are available from the Department of Commerce for a full year on the per capita income of Alaska shall prescribe a Federal share for Alaska of 50 per centum and, for purposes of such promulgations, Alaska shall not be included as part of the "United States." Promulgations made thereafter but before per capita income data for Alaska for a full three-year period are available for the Department of Commerce shall be based on satisfactory data available therefrom for Alaska for such one full year or, when such data are available for a two-year period, for such two years.

(i) The population of the several States shall be determined on the

basis of the latest figures furnished by the Department of Commerce.

(j) The method of computing and paying amounts pursuant to subsection (d) or (e) shall be as follows:

(1) The Secretary shall, prior to the beginning of each calendar quarter or other period prescribed by him, estimate the amount to be paid to each State (or to each interstate agency in the case of subsection (e)) under the provisions of such subsection for such period, such estimate to be based on such records of the State (or the interstate agency) and information furnished by it, and such other investigation, as the Secretary may find necessary.

(2) The Secretary shall pay to the State (or to the interstate agency), from the allotment available therefor, the amount so estimated by him for any period, reduced or increased, as the case may be, by any sum (not previously adjusted under this paragraph) by

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which he finds that his estimate of the amount to be paid such State (or such interstate agency) for any prior period under such subsection was greater or less than the amount which should have been paid to such State (or such agency) for such prior period under such subsection. Such payments shall be made through the disbursing facilities of the Treasury Department, in such installments as the Secretary may determine.

#### GRANTS FOR CONSTRUCTION

[SEC. 6.] SEC. 8. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the construction of necessary treatment works to prevent the discharge of untreated or inadequately treated sewage or other waste into any waters and for the purpose of reports, plans, and specifications in connection therewith.

(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) except as otherwise provided in this clause, no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary, or in an amount exceeding [\$600,000,] \$1,000,000, whichever is the smaller: *Provided*, That the grantee agrees to pay the remaining cost: *Provided further*, That, in the case of a project which will serve more than one municipality (A) the Secretary shall, on such basis as he determines to be reasonable

and equitable, allocate to each municipality to be served by such project its share of the estimated reasonable cost of such project, and shall then apply the limitations provided in this clause (2) to each such share as if it were a separate project to determine the maximum amount of any grant which could be made under this section with respect to each such share, and the total of all the amounts so determined or [\$2,400,000,] \$4,000,000, whichever is the smaller, shall be the maximum amount of the grant which may be made under this section on account of such project, and (B) for the purpose of the limitation in the last sentence of subsection (d), the share of each municipality so determined shall be regarded as a grant for the construction of treatment works; (3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; (4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of [section 5] *section 7* and has been certified by the State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs; and (5) no grant shall be made under this section for any project in any State in an amount exceeding \$250,000 until a grant has been made thereunder for each project in such State (A) for which an application was filed with the appropriate State water pollution control agency prior to one year after the date of enactment of this clause and (B) which the Secretary determines met the requirements of this section and regula-

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tions thereunder as in effect prior to the date of enactment of this clause.

(c) In determining the desirability of projects for treatment works and of approving Federal financial aid in connection therewith, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for any fiscal year shall be allotted by the Secretary from time to time, in accordance with regulations, as follows: (1) 50 per centum of such sums in the ratio that the popula-

tion of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the quotient obtained by dividing the per capita income of the United States by the per capita income of each State bears to the sum of such quotients for all the States. Sums allotted to a State under the preceding sentence which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b) (1) of this section and certified as entitled to priority under subsection (b) (4) of this section, shall be reallocated by the Secretary, on such basis as he determines to be reasonable and equitable and in accordance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made because of lack of funds: *Provided, however,* That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or activity. Any sum made available to a State by reallocation under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second and third sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this section. For purposes of this section, population shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce, and per capita income for each State and for the United States shall be determined on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce.

(d) There are hereby authorized to be appropriated for each fiscal year through and including the fiscal year ending June 30, 1961, the sum of \$50,000,000 per fiscal year for the purpose of making grants under this section. There are hereby authorized to be appropriated for the purpose of making grants under this section, \$80,000,000 for

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the fiscal year ending June 30, 1962, \$90,000,000 for the fiscal year ending June 30, 1963, \$100,000,000 for the fiscal year ending June 30, 1964, \$100,000,000 for the fiscal year ending June 30, 1965, \$100,000,-

000 for the fiscal year ending June 30, 1966, and \$100,000,000 for the fiscal year ending June 30, 1967. Sums so appropriated shall remain available until expended: *Provided*, That at least 50 percent of the funds so appropriated for each fiscal year shall be used for grants for the construction of treatment works servicing municipalities of 125,000 population or under.

(e) The Secretary shall make payments under this section through the disbursing facilities of the Department of the Treasury. Funds so paid shall be used exclusively to meet the cost of construction of the project for which the amount was paid. As used in this section the term "construction" includes preliminary planning to determine the economic and engineering feasibility of treatment works the engineering, architectural legal, fiscal, and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary to the construction of treatment works; and the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works; and the inspection and supervision of the construction of treatment works.

(f) *Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant by 10 per centum for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan area. For the purposes of this subsection, the term "metropolitan area" means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget except as may be determined by the President or by the Bureau of the Budget as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and other activities, which in the opinion of the President or the Bureau of the Budget lends itself as being appropriate for the purposes hereof.*

[(f)] (g) The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on projects for which grants are made under this section shall be paid wages at rates not less than those prevailing for

the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C., secs. 276a through 276a-5). *The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276(c)).*

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[SEC. 7.] SEC. 9. (a) (1) There is hereby established in the Department of Health, Education, and Welfare, a Water Pollution Control Advisory Board, composed of the Secretary or his designee, who shall be chairman, and nine members appointed by the President, none of whom shall be Federal officers or employees. The appointed members, having due regard for the purposes of this Act, shall be selected from among representatives of various State, interstate and local governmental agencies, of public or private interests contributing to, affected by, or concerned with water pollution, and of other public and private agencies, organizations, or groups demonstrating an active interest in the field of water pollution prevention and control, as well as other individuals who are expert in this field.

(2) (A) Each member appointed by the President shall hold office for a term of three years, except that (i) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (ii) the terms of office of the members first taking office after June 30, 1956, shall expire as follows: three at the end of one year after such date, three at the end of two years after such date, and three at the end of three years after such date, as designated by the President at the time of appointment, and (iii) the term of any member under the preceding provisions shall be extended until the date on which his successor's appointment is effective. None of the members appointed by the President shall be eligible for reappointment within one year after the end of his preceding term but terms commencing prior to the enactment of the Water Pollution Control Act Amendments of 1956 shall not be deemed "preceding terms" for purposes of this sentence.

(B) The members of the Board who are not officers or employees of the United States, while attending conferences or meetings of the Board or while otherwise serving at the request of the Secretary, shall be entitled to receive compensation at a rate to be fixed by the Secretary, but not exceeding \$50 per diem, including travel time, and while

away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(b) The Board shall advise, consult with, and make recommendations to the Secretary on matters of policy relating to the activities and functions of the Secretary under this Act.

(c) Such clerical and technical assistance as may be necessary to discharge the duties of the Board shall be provided from the personnel of the Department of Health, Education, and Welfare.

ENFORCEMENT MEASURES AGAINST POLLUTION OF INTERSTATE OF  
NAVIGABLE WATERS

[SEC. 8.] SEC. 10. (a) The pollution of interstate or navigable waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge into a tributary of such waters), which endangers the health or welfare of any persons, shall be subject to abatement as provided in this Act.

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(b) Consistent with the policy declaration of this Act, State and interstate action to abate pollution of interstate or navigable waters shall be encouraged and shall not, except as otherwise provided by or pursuant to court order under [subsection (g)] *subsection (h)*, be displaced by Federal enforcement action.

(c) (1) *In order to carry out the purposes of this Act, the Secretary may, after reasonable notice and public hearing and consultation with the Secretary of the Interior and with other Federal agencies, with State and interstate water pollution control agencies, and with municipalities and industries involved, prepare regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof.*

(2) *Such standards of quality shall be such as to protect the public health or welfare and serve the purposes of this Act. In establishing standards designed to enhance the quality of such waters, the Secretary shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.*

(3) *The Secretary shall promulgate standards pursuant to paragraphs (1) and (4) of this subsection with respect to any waters only if, within a reasonable time after being requested by the Secretary to do so, the appropriate States and interstate agencies have not developed standards found by the Secretary to be consistent with paragraph*

(2) of this subsection and applicable to such interstate waters or portions thereof.

(4) The Secretary shall also call a public hearing after reasonable notice on his own motion or when petitioned to do so by the Governor of any State subject to or affected by the water quality standards promulgated pursuant to this subsection for the purpose of considering a revision in such standards. The Secretary may after reasonable notice and public hearing and consultation with the Secretary of the Interior and with other Federal agencies, with State and Interstate water pollution control agencies, and with municipalities and industries involved, prepare revised regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof.

(5) The discharge of matter into such interstate waters, which reduces the quality of such waters below the water quality standards promulgated by the Secretary pursuant to paragraph (3) of this subsection or established by the appropriate State or interstate agencies consistent with paragraph (2) of this subsection (whether the matter causing or contributing to such reduction is discharged directly into such waters or reaches such waters after discharge into tributaries of such waters), is subject to abatement in accordance with the provisions of this section.

(6) Nothing in this subsection shall (a) prevent the application of this section to any case to which subsection (a) of this section would otherwise be applicable, or (b) extend Federal jurisdiction over water not otherwise authorized by this Act.

[(c)](d) (1) Whenever requested by the Governor of any State or a State water pollution control agency, or (with the concurrence of the Governor and of the State water pollution control agency for the State in which the municipality is situated) the governing body of any municipality, the Secretary shall, if such request refers to pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (causing or contributing to such pollution) originates, give formal notification thereof to the water pollution control agency and interstate agency, if any, of the State or States where such discharge or discharges originate and shall call promptly a conference of such agency or agencies and of the State water pollution control agency and interstate agency, if

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any, of the State or States, if any, which may be adversely affected by such pollution. Whenever requested by the Governor of any State, the Secretary shall, if such request refers to pollution of interstate or navigable waters which is endangering the



health or welfare of persons only in the requesting State in which the discharge or discharges (causing or contributing to such pollution) originate, give formal notification thereof to the water pollution control agency and interstate agency, if any, of such State and shall promptly call a conference of such agency or agencies, unless, in the judgment of the Secretary, the effect of such pollution on the legitimate uses of the waters is not of sufficient significance to warrant exercise of Federal jurisdiction under this section. The Secretary shall also call such a conference whenever, on the basis of reports, surveys, or studies, he has reason to believe that any pollution referred to in subsection (a) and endangering the health or welfare of persons in a State other than that in which the discharge or discharges originate is occurring[.]; *or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities.*

(2) The agencies called to attend such conference may bring such persons as they desire to the conference. Not less than three weeks' prior notice of the conference date shall be given to such agencies.

(3) Following this conference, the Secretary shall prepare and forward to all the water pollution control agencies attending the conference a summary of conference discussions including (A) occurrence of pollution of interstate and navigable waters subject to abatement under this Act; (B) adequacy of measures taken toward abatement of the pollution; and (C) nature of delays, if any, being encountered in abating the pollution.

[(d)] (e) If the Secretary believes, upon the conclusion of the conference or thereafter, that effective progress toward abatement of such pollution is not being made and that the health or welfare of any persons is being endangered, he shall recommend to the appropriate State water pollution control agency that it take necessary remedial action. The Secretary shall allow at least six months from the date he makes such recommendations for the taking of such recommended action.

[(e)] (f) If, at the conclusion of the period so allowed, such remedial action has not been taken or action which in the judgment of the Secretary is reasonably calculated to secure abatement of such pollution has not been taken, the Secretary shall call a public hearing, to be held in or near one or more of the places where the discharge or discharges causing or contributing to such pollution originated, before a Hearing Board of five or more persons appointed by the Secretary. Each State in which any discharge causing or contributing to such pollution originates and each State claiming to be adversely affected by such pollution shall be given an opportunity to select one member

of the Hearing Board and at least one member shall be a representative of the Department of Commerce, and not less than a majority of the Hearing Board shall be persons other than officers or employees of

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the Department of Health, Education, and Welfare. At least three weeks' prior notice of such hearing shall be given to the State water pollution control agencies and interstate agencies, if any, called to attend the aforesaid hearing and the alleged polluter or polluters. On the basis of the evidence presented at such hearing, *including the practicability of complying with such standards as may be applicable*, the Hearing Board shall make findings as to whether pollution referred to in subsection (a) is occurring and whether effective progress toward abatement thereof is being made. If the Hearing Board finds such pollution is occurring and effective progress toward abatement thereof is not being made it shall make recommendations to the Secretary concerning the measures, if any, which it finds to be reasonable and equitable to secure abatement of such pollution. The Secretary shall send such findings and recommendations to the person or persons discharging any matter causing or contributing to such pollution, together with a notice specifying a reasonable time (not less than six months) to secure abatement of such pollution, and shall also send such findings and recommendations and such notice to the State water pollution control agency and to the interstate agency, if any, of the State or States where such discharge or discharges originate.

[(f)] (g) If action reasonably calculated to secure abatement of the pollution within the time specified in the notice following the public hearing is not taken, the Secretary—

(1) in the case of pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (causing or contributing to such pollution) originate, may request the Attorney General to bring a suit on behalf of the United States to secure abatement of pollution, and

(2) in the case of pollution of waters which is endangering the health or welfare of persons only in the State in which the discharge or discharges (causing or contributing to such pollution) originate, may, with the written consent of the Governor of such State, request the Attorney General to bring a suit on behalf of the United States to secure abatement of the pollution.

[(g)] (h) The court shall receive in evidence in any such suit a transcript of the proceedings before the Board and a copy of the Board's recommendations and shall receive such further evidence as the court in its discretion deems proper. The court, giving due con-

sideration to the practicability of *complying with such standards as may be applicable* and to the physical and economic feasibility of securing abatement of any pollution proved, shall have jurisdiction to enter such judgment, and orders enforcing such judgment, as the public interest and the equities of the case may require.

[(h)] (i) Members of any Hearing Board appointed pursuant to [subsection (e)] *subsection (f)* who are not regular full-time officers or employees of the United States shall, while participating in the hearing conducted by such Board or otherwise engaged on the work of such Board, be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

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[(i)] (j) As used in this section the term—

(1) “person” includes an individual, corporation, partnership, association, State, municipality, and political subdivision of a State, and

(2) “municipality” means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law.

#### COOPERATION TO CONTROL POLLUTION FROM FEDERAL INSTALLATIONS

[SEC. 9.] SEC. 11. It is hereby declared to be the intent of the Congress that any Federal department or agency having jurisdiction over any building, installation, or other property shall, insofar as practicable and consistent with the interests of the United States and within any available appropriations, cooperate with the Department of Health, Education, and Welfare, and with any State or interstate agency or municipality having jurisdiction over waters into which any matter is discharged from such property, in preventing or controlling the pollution of such waters. In his summary of any conference pursuant to [section 8(c) (3)] *section 10(d) (3)* of this Act, the Secretary shall include references to any discharges allegedly contributing to pollution from any Federal property. Notice of any hearing pursuant to [section 8(e)] *section 10(f)* involving any pollution alleged to be effected by any such discharges shall also be given to the Federal agency having jurisdiction over the property involved and the findings and recommendations of the Hearing Board conducting such hearings shall also include references to any such discharges which are contributing to the pollution found by such Hearing Board.

#### ADMINISTRATION

[SEC. 10.] SEC. 12. (a) The Secretary is authorized to prescribe

such regulations as are necessary to carry out his functions under this Act.

(b) The Secretary, with the consent of the head of any other agency of the United States, may utilize such officers and employees of such agency as may be found necessary to assist in carrying out the purposes of this Act.

(c) There are hereby authorized to be appropriated to the Department of Health, Education, and Welfare such sums as may be necessary to enable it to carry out its functions under this Act.

(d) *Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.*

(e) *The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act.*

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#### DEFINITIONS

[SEC. 11.] SEC. 13. When used in this Act—

(a) The term “State water pollution control agency” means the State health authority, except that, in the case of any State in which there is a single State agency, other than the State health authority, charged with responsibility for enforcing State laws relating to abatement of water pollution, it means such other State agency.

(b) The term “interstate agency” means an agency of two or more States established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution of waters.

(c) The term “treatment works” means the various devices used in the treatment of sewage or industrial wastes of a liquid nature, including the necessary intercepting sewers, outfall sewers, pumping, power, and other equipment, and their appurtenances, and includes any extensions, improvements, remodeling, additions, and alterations thereof.

(d) The term “State” means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, and Guam.

(e) The term "interstate waters" means all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters.

(f) The term "municipality" means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.

#### OTHER AUTHORITY NOT AFFECTED

[SEC. 12.] SEC. 14. This Act shall not be construed as (1) superseding or limiting the functions, under any other law, of the Surgeon General or of the Public Health Service, or of any other officer or agency of the United States, relating to water pollution, or (2) affecting or impairing the provisions of the Oil Pollution Act, 1924, or sections 13 through 17 of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors and for other purposes", approved March 3, 1899, as amended, or (3) affecting or impairing the provisions of any treaty of the United States.

#### SEPARABILITY

[SEC. 13.] SEC. 15. If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

#### SHORT TITLE

[SEC. 14.] SEC. 16. This Act may be cited as the "Federal Water Pollution Control Act."

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#### REORGANIZATION PLAN NO. 1 OF 1953

Prepared by the President and transmitted to the Senate and the House of Representatives in Congress assembled, March 12, 1953, pursuant to the provisions of the Reorganization Act of 1949, approved June 20, 1949, as amended

#### DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

SECTION 1. *Creation of Department; Secretary.*—There is hereby established an executive department, which shall be known as the Department of Health, Education, and Welfare (hereafter in this reorganization plan referred to as the Department). There shall be at the head of the Department a Secretary of Health, Education, and Welfare (hereafter in this reorganization plan referred to as the

Secretary), who shall be appointed by the President by and with the advice and consent of the Senate, and who shall receive compensation at the rate now or hereafter prescribed by law for the heads of executive departments. The Department shall be administered under the supervision and direction of the Secretary.

SEC. 2. *Under Secretary and Assistant Secretaries.*—There shall be in the Department an Under Secretary of Health, Education, and Welfare and [two] *three* Assistant Secretaries of Health, Education, and Welfare, each of whom shall be appointed by the President by and with the advice and consent of the Senate, shall perform such functions as the Secretary may prescribe, and shall receive compensation at the rate now or hereafter provided by law for under secretaries and assistant secretaries, respectively, of executive departments. The Under Secretary (or, during the absence or disability of the Under Secretary or in the event of a vacancy in the office of Under Secretary, an Assistant Secretary determined according to such order as the Secretary shall prescribe) shall act as Secretary during the absence or disability of the Secretary or in the event of a vacancy in the office of Secretary.

SEC. 3. *Special Assistant.*—There shall be in the Department a Special Assistant to the Secretary (Health and Medical Affairs) who shall be appointed by the President by and with the advice and consent of the Senate from among persons who are recognized leaders in the medical field with wide nongovernmental experience, shall review the health and medical programs of the Department and advise the Secretary with respect to the improvement of such programs and with respect to necessary legislation in the health and medical fields, and shall receive compensation at the rate now or hereafter provided by law for assistant secretaries of executive departments.

SEC. 4. *Commissioner of Social Security.*—There shall be in the Department a Commissioner of Social Security who shall be appointed by the President by and with the advice and consent of the Senate, shall perform such functions concerning social security and public welfare as the Secretary may prescribe, and shall receive compensation at the rate now or hereafter fixed by law for grade GS-18 of the general schedule established by the Classification Act of 1949, as amended.

SEC. 5. *Transfers to the Department.*—All functions of the Federal Security Administrator are hereby transferred to the Secretary. All agencies of the Federal Security Agency, together with their respective functions, personnel, property, records, and unexpended balances of appropriations, allocations, and other funds (available or to be made

available), and all other functions, personnel, property, records, and unexpended balances of appropriations, allocations, and other funds (available or to be made available) of the Federal Security Agency are hereby transferred to the Department.

SEC. 6. *Performance of functions of the Secretary.*—The Secretary may from time to time make such provisions as the Secretary deems appropriate authorizing the performance of any of the functions of the Secretary by any other officer, or by an agency or employee, of the Department.

SEC. 7. *Administrative services.*—In the interest of economy and efficiency the Secretary may from time to time establish central administrative services in the fields of procurement, budgeting, accounting, personnel, library, legal, and other services and activities common to the several agencies of the Department; and the Secretary may effect such transfers within the Department of the personnel employed, the property and records used or held, and the funds available for use in connection with such administrative-service activities as the Secretary may deem necessary for the conduct of any services so established: *Provided*, That no professional or substantive function vested by law in any officer shall be removed from the jurisdiction of such officer under this section.

SEC. 8. *Abolitions.*—The Federal Security Agency (exclusive of the agencies thereof transferred by sec. 5 of this reorganization plan), the offices of Federal Security Administrator and Assistant Federal Security Administrator created by Reorganization Plan No. 1 (53 Stat. 1423), the two offices of assistant heads of the Federal Security Agency created by Reorganization Plan No. 2 of 1946 (60 Stat. 1095), and the office of Commissioner for Social Security created by section 701 of the Social Security Act, as amended (64 Stat. 558), are hereby abolished. The Secretary shall make such provisions as may be necessary in order to wind up any outstanding affairs of the Agency and offices abolished by this section which are not otherwise provided for in this reorganization plan.

SEC. 9. *Interim provisions.*—The President may authorize the persons who immediately prior to the time this reorganization plan takes effect occupy the offices of Federal Security Administrator, Assistant Federal Security Administrator, assistant heads of the Federal Security Agency, and Commissioner for Social Security to act as Secretary, Under Secretary, and Assistant Secretaries of Health, Education, and Welfare and as Commissioner of Social Security, respectively, until those offices are filled by appointment in the manner provided by sections 1, 2, and 4 of this reorganization plan, but not for a period of more than 60 days. While so acting, such persons shall receive compensation at the rates provided by this

reorganization plan for the offices the functions of which they perform.

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### FEDERAL EXECUTIVE SALARY ACT OF 1964

[78 Stat. 400]

AN ACT To adjust the rates of basic compensation of certain officers and employees in the Federal Government, and for other purposes

\* \* \* \* \*

SEC. 303. \* \* \*

\* \* \* \* \*

(d) Level IV of the Federal Executive Salary Schedule shall apply to the following offices and positions, for which the annual rate of basic compensation shall be \$27,000:

\* \* \* \* \*

(17) Assistant Secretaries of Health, Education, and Welfare [(2)] (3).

\* \* \* \* \*

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### 1.2h(3) COMMITTEE OF CONFERENCE

H.R. REP. No. 1022, 89th Cong., 1st Sess. (1965)

### WATER QUALITY ACT OF 1965

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SEPTEMBER 17, 1965.—Ordered to be printed

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Mr. BLATNIK, from the committee of conference, submitted the following

### CONFERENCE REPORT

[To accompany S. 4]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish



the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *That (a) (1) section 1 of the Federal Water Pollution Control Act (33 U.S.C. 466) is amended by inserting after the words "SECTION 1." a new subsection (a) as follows:*

*"(a) The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution."*

*(2) Such section is further amended by redesignating subsections (a) and (b) thereof as (b) and (c), respectively.*

*(3) Subsection (b) of such section (as redesignated by paragraph (2) of this subsection) is amended by striking out the last sentence thereof and inserting in lieu of such sentence the following: "The Secretary of Health, Education, and Welfare (hereinafter in this Act called 'Secretary') shall administer this Act through the Administration created by section 2 of this Act, and with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by*

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*him, shall supervise and direct (1) the head of such Administration in administering this Act and (2) the administration of all other functions of the Department of Health, Education, and Welfare related to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe."*

*(b) There shall be in the Department of Health, Education, and Welfare, in addition to the Assistant Secretaries now provided for by law, one additional Assistant Secretary of Health, Education, and Welfare who shall be appointed by the President, by and with the advice and consent of the Senate. The provisions of section 2 of Reorganization Plan Numbered 1 of 1953 (67 Stat. 631) shall be applicable to such additional Assistant Secretary to the same extent as they are applicable to the Assistant Secretaries authorized by that section. Paragraph (17) of section 303(d) of the Federal Executive Salary Act of 1964 (78 Stat. 418) is amended by striking out "(5)" before the period at the end thereof and inserting in lieu thereof "(6)."*

SEC. 2. (a) Such Act is further amended by redesignating sections 2 through 4, and references thereto, as sections 3 through 5, respectively, sections 5 through 14, as sections 7 through 16, respectively, by inserting after section 1 the following new section:

**"FEDERAL WATER POLLUTION CONTROL ADMINISTRATION**

**"SEC. 2.** Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the 'Administration'). The head of the Administration shall be appointed, and his compensation fixed, by the Secretary. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from the personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge the Administration's functions and may for that purpose use funds available for carrying out such functions; and he may delegate any of his functions to, or otherwise authorize their performance by, any officer or employee of, or assigned or detailed to, the Administration."

(b) Subject to such requirements as the Civil Service Commission may prescribe, any commissioned officer of the Public Health Service who, on the day before the effective date of the establishment of the Federal Water Pollution Control Administration, was, as such officer, performing functions relating to the Federal Water Pollution Control Act may acquire competitive civil service status and be transferred to a classified position in the Administration if he so transfers within six months (or such further period as the Secretary of Health, Education, and Welfare may find necessary in individual cases) after such effective date. No commissioned officer of the Public Health Service may be transferred to the Administration under this section if he does not consent to such transfer. As used in this section, the term "transferring officer" means an officer transferred in accordance with this subsection.

(c) (1) The Secretary shall deposit in the Treasury of the United States to the credit of the civil service retirement and disability fund, on behalf of and to the credit of each transferring officer, an amount equal to that which such individual would be required to deposit in such fund to cover the years of service credited to him for purposes of his retirement as a commissioned officer of the Public Health Service to the date of his transfer

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as provided in subsection (b), but only to the extent that such service

is otherwise creditable under the Civil Service Retirement Act. The amount so required to be deposited with respect to any transferring officer shall be computed on the basis of the sum of his basic pay, allowance for quarters, and allowance for subsistence and, in the case of a medical officer, his special pay, during the years of service so creditable, including all such years after June 30, 1960.

(2) The deposits which the Secretary of Health, Education, and Welfare is required to make under this subsection with respect to any transferring officer shall be made within two years after the date of his transfer as provided in subsection (b), and the amounts due under this subsection shall include interest computed from the period of service credited to the date of payment in accordance with section 4(e) of the Civil Service Retirement Act (5 U.S.C. 2254(e)).

(d) All past service of a transferring officer as a commissioned officer of the Public Health Service shall be considered as civilian service for all purposes under the Civil Service Retirement Act, effective as of the date any such transferring officer acquires civil service status as an employee of the Federal Water Pollution Control Administration; however, no transferring officer may become entitled to benefits under both the Civil Service Retirement Act and title II of the Social Security Act based on service as such a commissioned officer performed after 1956, but the individual (or his survivors) may irrevocably elect to waive benefit credit for the service under one Act to secure credit under the other.

(e) A transferring officer on whose behalf a deposit is required to be made by subsection (c) and who, after transfer to a classified position in the Federal Water Pollution Control Administration under subsection (b), is separated from Federal service or transfers to a position not covered by the Civil Service Retirement Act, shall not be entitled, nor shall his survivors be entitled, to a refund of any amount deposited on his behalf in accordance with this section. In the event he transfers, after transfer under subsection (b), to a position covered by another Government staff retirement system under which credit is allowable for service with respect to which a deposit is required under subsection (c), no credit shall be allowed under the Civil Service Retirement Act with respect to such service.

(f) Each transferring officer who prior to January 1, 1957, was insured pursuant to the Federal Employees' Group Life Insurance Act of 1954, and who subsequently waived such insurance, shall be entitled to become insured under such Act upon his transfer to the Federal Water Pollution Control Administration regardless of age and insurability.

(g) Any commissioned officer of the Public Health Service who, pursuant to subsection (b) of this section, is transferred to a position

*in the Federal Water Pollution Control Administration which is subject to the Classification Act of 1949, as amended, shall receive a salary rate of the General Schedule grade of such position which is nearest to but no less than the sum of (1) basic pay, quarters and subsistence allowances, and, in the case of a medical officer, special pay, to which he was entitled as a commissioned officer of the Public Health Service on the day immediately preceding his transfer, and (2) an amount equal to the equalization factor (as defined in this subsection); but in no event shall the rate so established exceed the maximum rate of such grade. As used in this section, the term "equalization factor" means an amount determined by the Secretary to be equal to the sum of (A) 6½ per centum of such basic pay and (B) the amount of Federal income tax which the transferring*

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*officer, had he remained a commissioned officer, would have been required to pay on such allowances for quarters and subsistence for the taxable year then current if they had not been tax free.*

*(h) A transferring officer who has had one or more years of commissioned service in the Public Health Service immediately prior to his transfer under subsection (b) shall, on the date of such transfer, be credited with thirteen days of sick leave.*

*(i) Notwithstanding the provisions of any other law, any commissioned officer of the United States Public Health Service with twenty-five or more years of service who has held the temporary rank of Assistant Surgeon General in the Division of Water Supply and Pollution Control of the United States Public Health Service for three or more years and whose position and duties are affected by the Act, may, with the approval of the President, voluntarily retire from the United States Public Health Service with the same retirement benefits that would accrue to him if he had held the rank of Assistant Surgeon General for a period of four years or more if he so retires within ninety days of the date of the establishment of the Federal Water Pollution Control Administration.*

*(j) Nothing contained in this section shall be construed to restrict or in any way limit the head of the Federal Water Pollution Control Administration in matters of organization or in otherwise carrying out his duties under section 2 of this Act as he deems appropriate to the discharge of the functions of such Administration.*

*(k) The Surgeon General shall be consulted by the head of the Administration on the public health aspects relating to water pollution over which the head of such Administration has administrative responsibility.*

SEC. 3. Such Act is further amended by inserting after the section

redesignated as section 5 a new section as follows:

**"GRANTS FOR RESEARCH AND DEVELOPMENT**

"SEC. 6. (a) *The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith. The Secretary is authorized to provide for the conduct of research and demonstrations relating to new or improved methods of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes, except that not to exceed 25 per centum of the total amount appropriated under authority of this section for any fiscal year may be expended under authority of this sentence during such fiscal year.*

"(b) *Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary; (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made for any project under this section*

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*unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes.*

"(c) *There are hereby authorized to be appropriated for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purposes of this section. Sums so appropriated shall remain available until expended. No grant or contract shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year.*"

SEC. 4. (a) Clause (2) of subsection (b) of the section of the

*Federal Water Pollution Control Act herein redesignated as section 8 is amended by striking out “\$600,000,” and inserting in lieu thereof \$1,200,000.”*

*(b) The second proviso in clause (2) of subsection (b) of such redesignated section 8 is amended by striking out “\$2,400,000,” and inserting in lieu thereof “\$4,800,000.”*

*(c) Subsection (b) of such redesignated section 8 is amended by adding at the end thereof the following: “The limitations of \$1,200,000 and \$4,800,000 imposed by clause (2) of this subsection shall not apply in the case of grants made under this section from funds allocated under the third sentence of subsection (c) of this section if the State agrees to match equally all Federal grants made from such allocation for projects in such State.”*

*(d) (1) The second sentence of subsection (c) of such redesignated section 8 is amended by striking out “for any fiscal year” and inserting in lieu thereof “for each fiscal year ending on or before June 30, 1965, and the first \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965.”*

*(2) Subsection (c) of such redesignated section 8 is amended by inserting immediately after the period at the end of the second sentence thereof the following: All sums in excess of \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States.”*

*(3) The third sentence of subsection (c) of such redesignated section 8 is amended by striking out “the preceding sentence” and inserting in lieu thereof “the two preceding sentences”.*

*(4) The next to the last sentence of subsection (c) of such redesignated section 8 is amended by striking out “and third” and inserting in lieu thereof “, third, and fourth”.*

*(e) The last sentence of subsection (d) of such redesignated section 8 is amended to read as follows: “Sums so appropriated shall remain available until expended. At least 50 per centum of the funds so appropriated for each fiscal year ending on or before June 30, 1965, and at least 50 per centum of the first \$100,000,000 so appropriated for each fiscal year beginning on or after July 1, 1965, shall be used for grants for the construction of treatment works servicing municipalities of one hundred and twenty-five thousand population or under.”*

*(f) Subsection (d) of such redesignated section 8 is amended by striking out “\$100,000,000 for the fiscal year ending June 30, 1966, and \$100,000,000 for the fiscal year ending June 30, 1967.” and inserting in lieu*

thereof "\$150,000,000 for the fiscal year ending June 30, 1966, and \$150,000,000 for the fiscal year ending June 30, 1967."

(g) Subsection (f) of such redesignated section 8 is redesignated as subsection (g) thereof and is amended by adding at the end thereof the following new sentence: "The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z—15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c)."

(h) Such redesignated section 8 is further amended by inserting therein, immediately after subsection (e) thereof, the following new subsection:

"(f) Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 10 per centum of the amount of such grant for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan area. For the purposes of this subsection, the term 'metropolitan area' means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget, except as may be determined by the President as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and other activities, which in the opinion of the President lends itself as being appropriate for the purposes hereof."

SEC. 5. (a) Redesignated section 10 of the Federal Water Pollution Control Act is amended by redesignating subsections (c) through (i) as subsections (d) through (j), and by inserting after subsection (b) the following new subsection:

"(c) (1) If the Governor of a State or a State water pollution control agency files, within one year after the date of enactment of this subsection, a letter of intent that such State, after public hearings, will before June 30, 1967, adopt (A) water quality criteria applicable to interstate waters or portions thereof within such State, and (B) a plan for the implementation and enforcement of the water quality

criteria adopted, and if such criteria and plan are established in accordance with the letter of intent, and if the Secretary determines that such State criteria and plan are consistent with paragraph (3) of this subsection, such State criteria and plan shall thereafter be the water quality standards applicable to such interstate waters or portions thereof.

(2) If a State does not (A) file a letter of intent or (B) establish water quality standards in accordance with paragraph (1) of this subsection, or if the Secretary or the Governor of any State affected by water quality standards established pursuant to this subsection desires a revision in such standards, the Secretary may, after reasonable notice and a conference of representatives of appropriate Federal departments and agencies, interstate agencies, States, municipalities and industries involved, prepare regulations setting forth standards of water quality to be appli-

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cable to interstate waters or portions thereof. If, within six months from the date the Secretary publishes such regulations, the State has not adopted water quality standards found by the Secretary to be consistent with paragraph (3) of this subsection, or a petition for public hearing has not been filed under paragraph (4) of this subsection, the Secretary shall promulgate such standards.

“(3) Standards of quality established pursuant to this subsection shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act. In establishing such standards the Secretary, the Hearing Board, or the appropriate State authority shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

“(4) If at any time prior to 30 days after standards have been promulgated under paragraph (2) of this subsection, the Governor of any State affected by such standards petitions the Secretary for a hearing, the Secretary shall call a public hearing, to be held in or near one or more of the places where the water quality standards will take effect, before a Hearing Board of five or more persons appointed by the Secretary. Each State which would be affected by such standards shall be given an opportunity to select one member of the Hearing Board. The Department of Commerce and other affected Federal departments and agencies shall each be given an opportunity to select a member of the Hearing Board and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. The members of the Board who are not officers or employees of the United



*States, while participating in the hearing conducted by such Hearing Board or otherwise engaged on the work of such Hearing Board, shall be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently. Notice of such hearing shall be published in the Federal Register and given to the State water pollution control agencies, interstate agencies and municipalities involved at least 30 days prior to the date of such hearing. On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether the standards published or promulgated by the Secretary should be approved or modified and transmit its findings to the Secretary. If the Hearing Board approves the standards as published or promulgated by the Secretary, the standards shall take effect on receipt by the Secretary of the Hearing Board's recommendations. If the Hearing Board recommends modifications in the standards as published or promulgated by the Secretary, the Secretary shall promulgate revised regulations setting forth standards of water quality in accordance with the Hearing Board's recommendations which will become effective immediately upon promulgation.*

*"(5) The discharge of matter into such interstate waters or portions thereof, which reduces the quality of such waters below the water quality standards established under this subsection (whether the matter causing or contributing to such reduction is discharged directly into such waters or reaches such waters after discharge into tributaries of such waters), is subject to abatement in accordance with the provisions of paragraph (1) or (2) of subsection (g) of this section, except that at least 180 days before any abatement action is initiated under either paragraph (1) or*

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*(2) of subsection (g) as authorized by this subsection, the Secretary shall notify the violators and other interested parties of the violation of such standards. In any suit brought under the provisions of this subsection the court shall receive in evidence a transcript of the proceedings of the conference and hearing provided for in this subsection, together with the recommendations of the conference and Hearing Board and the recommendations and standards promulgated by the Secretary, and such additional evidence, including that relating to the alleged violation of the standards, as it deems necessary to a complete review of the standards and to a determination of all other issues relating to the alleged violation. The court, giving due*

consideration to the practicability and to the physical and economic feasibility of complying with such standards, shall have jurisdiction to enter such judgment and orders enforcing such judgment as the public interest and the equities of the case may require.

“(6) Nothing in this subsection shall (A) prevent the application of this section to any case to which subsection (a) of this section would otherwise be applicable, or (B) extend Federal jurisdiction over water not otherwise authorized by this Act.

“(7) In connection with any hearings under this section no witness or any other person shall be required to divulge trade secrets or secret processes.”

(b) Paragraph (1) of subsection (d) of the section of the Federal Water Pollution Control Act herein redesignated as section 10 is amended by striking out the final period after the third sentence of such subsection and inserting the following in lieu thereof: “; or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities.”

SEC. 6. The section of the Federal Water Pollution Control Act hereinbefore redesignated as section 12 is amended by adding at the end thereof the following new subsections:

“(d) Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

“(e) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act.”

SEC. 7. (a) Section 7(f) (6) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out “section 6(b) (4).” as contained therein and inserting in lieu thereof “section 8(b) (4).”.

(b) Section 8 of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out “section 5” as contained therein and inserting in lieu thereof “section 7”.

(c) Section 10(b) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out

"subsection (g)" and inserting in lieu thereof "subsection (h)".

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(d) Section 10 (i) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out "subsection (e)" and inserting in lieu thereof "subsection (f)".

(e) Section 11 of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out "section 8(c) (3)" and inserting in lieu thereof "section 10(d) (3)" and by striking out "section 8(e)" and inserting in lieu thereof "section 10(f)".

SEC. 8. This Act may be cited as the "Water Quality Act of 1965".

And the House agree to the same.

That the Senate recede from its disagreement to the amendment of the House to the title and agree to the same.

GEORGE H. FALLON,  
JOHN A. BLATNIK,  
ROBT. E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN,

*Managers on the Part of the House.*

EDMUND S. MUSKIE,  
JENNINGS RANDOLPH,  
FRANK E. MOSS,  
J. CALEB BOGGS,  
JAMES B. PEARSON,

*Managers on the Part of the Senate.*

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#### STATEMENT OF THE MANAGERS ON THE PART OF THE HOUSE

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

The House amendment strikes out all of the Senate bill after the enacting clause and inserts a substitute. The Senate recedes from its disagreement to the amendment of the House with an amendment which is a substitute for both the Senate bill and the House amendment. The differences between the House amendment and the substitute agreed to in conference are noted in the following outline, except for technical and clerical corrections and changes.

#### ASSISTANT SECRETARY OF HEALTH, EDUCATION, AND WELFARE

Both the Senate bill and the House amendment in subsection (b) of the first section thereof provide for an additional Assistant Secretary of Health, Education, and Welfare to assist the Secretary of Health, Education, and Welfare in administering this act.

The conference substitute makes certain technical revisions in the language establishing this additional Assistant Secretary necessary because of the enactment of the Health Research Facilities Amendments of 1965. These amendments are technical in nature only.

The conferees wish to indicate the importance they believe should be placed on this reorganization of the water pollution control program within the Department of Health, Education, and Welfare. This new Assistant Secretary of Health, Education, and Welfare and the Administrator of the new Federal Water Pollution Control Administration should be individuals of the highest caliber with the finest possible background in the field of water pollution, so that this program can be accelerated and real progress can begin to be made in reducing the pollution of the streams of this Nation.

#### WATER QUALITY STANDARDS

The Senate bill in subsection (b) of section 5 amends redesignated section 10 of the Federal Water Pollution Control Act by adding thereto a new subsection (c) which authorizes the Secretary of Health, Education, and Welfare to establish standards of water quality to be applicable to interstate waters or portions thereof.

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These standards are to be formulated in accordance with administrative procedures calling for notice and public hearing, consultation with affected Federal, State, interstate, and local interests, and are required to be such as to protect the public health or welfare and otherwise generally to enhance the quality and value of interstate waters. These standards would also be subject to revision either by the Secretary on his own motion or when petitioned for revision by the Governor of any affected State. The same procedure for hearing and consultation would be followed in revisions as when standards

were originally being formulated. The Senate bill further directs the Secretary to promulgate standards only if the appropriate State and interstate agencies have not developed standards which he finds consistent with the purposes of the section within a reasonable time after being requested by the Secretary to do so. Once the Secretary has promulgated water quality standards or there have been standards established by State or interstate agencies consistent with the section, any discharge of matter which reduces the quality of the waters below the established standards is made subject to abatement under the existing enforcement procedures provided in the Federal Water Pollution Control Act.

Subsection (a) of section 5 of the House amendment amends redesignated section 7(f) of the Federal Water Pollution Control Act by adding at the end thereof a new clause (7) which provides that each State, within 90 days after the date of enactment of the bill, is to file with the Secretary a letter of intent that such State will establish water quality criteria applicable to interstate waters or portions thereof within its jurisdiction on or before June 30, 1967. Failure to file such a letter of intent would preclude the State from receiving any further funds under the Federal Water Pollution Control Act until such time as such a letter is filed.

Section 5(a) of the proposed conference substitute would amend redesignated section 10 of the Federal Water Pollution Control Act to add to that section a new subsection (c).

Paragraph (1) of this new subsection provides that if the Governor of a State or a State water pollution control agency files within 1 year after date of enactment of the subsection a letter of intent that such State after public hearings will before June 30, 1967, adopt water quality criteria applicable to interstate waters or portions thereof within such State and a plan to implement and enforce such criteria and if the Secretary determines that such criteria and plan are consistent with paragraph (3) of the subsection, then the State criteria and plan will thereafter be the water quality standards applicable to those interstate waters or portions thereof.

Paragraph (2) of the new subsection provides that if a State does not file a letter of intent or establish water quality standards under paragraph (1) or if the Secretary or Governor of any affected State wants a revision of the standards then the Secretary may after having given a reasonable notice and having had a conference of representatives of appropriate Federal departments and agencies, interstate agencies, States, municipalities, and affected industries, prepare and publish regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof. The Secretary may promulgate standards 6 months after the date he publishes his

regulations unless within that period the State has adopted water quality standards which the Secretary finds to be consistent with

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paragraph (3) of this subsection or a petition for a public hearing has been filed under paragraph (4) of this subsection.

Paragraph (4) of this subsection provides that if the Governor of any State affected by the standards petitions the Secretary for a hearing at any time after the regulations have been published and prior to 30 days after standards have been promulgated under paragraph (2), the Secretary is required to call a public hearing. This public hearing is to be held in or near one or more of the places where the standards will take effect and is to be before a hearing board consisting of at least five persons. The members of the hearing board are to be appointed by the Secretary. However, each affected State may select one member and the Department of Commerce and other affected agencies may each select one member. There is a further restriction that at least a majority of the hearing board must be persons other than officers or employees of the Department of Health, Education, and Welfare. The conferees expect that the Secretary will appoint at least one public member of each hearing board who will be from the area to be directly affected by the standards. Further, the conferees intend that the Secretary in appointing hearing boards will insure a proper balance between all affected interests. Paragraph (4) provides that members of the hearing board who are not officers or employees of the United States will receive compensation at a rate not to exceed \$100 per diem as well as travel expenses while away from their homes or regular places of business all in accordance with provisions of applicable law. Notice of the public hearing is to be published in the Federal Register and is to be given to the State water pollution agencies, interstate agencies, and municipalities involved at least 30 days before the hearing. After the evidence has been presented and on the basis thereof the hearing board is required to make findings as to whether the Secretary's standards should be approved or modified, and to transmit its findings to the Secretary. If the hearing board approves the standards as published or promulgated, they take effect when the Secretary receives the hearing board's recommendations. If modifications are recommended, the Secretary is required to promulgate revised regulations setting forth standards in accordance with the recommendations and these revised regulations will take effect immediately upon their promulgation.

Paragraph (5) of the new subsection provides that the discharge of matter into interstate waters or portions thereof which reduce

their quality below the applicable standard (whether the matter is discharged directly into the waters or reaches the waters after discharging into tributaries thereof) is subject to abatement in accordance with either paragraph (1) or (2) of subsection (g) of this section whichever of those paragraphs is applicable. However, before abatement is initiated under either paragraph (1) or (2) of subsection (g) the Secretary is required to notify the violators and other interested parties of the violation of the standards and at least 180 days must elapse so that there may be voluntary compliance. The conferees intend that during such period the Secretary should afford an opportunity for an informal hearing before himself or such hearing officer or board as he may appoint relative to the alleged violation of standards, upon the request of any affected State, alleged violator, or other interested party, so that if possible there can be voluntary agreement reached during this period, thus eliminating the necessity for suit. In any

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suit brought to secure abatement of pollution under this subsection the court is required to receive in evidence a transcript of the conference and hearing provided for in this subsection, the recommendations of the conference and the hearing board and the recommendations and standards promulgated by the Secretary and such additional evidence including that related to the alleged violation of the standards as the court deems necessary to a complete review of the standards as well as a determination of all other issues relating to the alleged violation. The court is given jurisdiction to enter whatever judgment and orders the public interest and equities of the case may require after having given due consideration to the practicability and to the physical and economic feasibility of complying with the applicable standards. The existing enforcement procedures in the present Water Pollution Control Act which consist of three stages, conference, public hearings, and court action, will continue to be applicable for enforcing the abatement of pollution which endangers the health or welfare of persons.

Paragraph (3) of this subsection requires standards of water quality established pursuant to this subsection to be such as to protect the public health or welfare, enhance water quality and generally to serve the purposes of the act. In establishing such standards the Secretary, hearing board, or State, as the case may be, is required to take into consideration their use and value for water supply, propagation of fish and wildlife, recreation, agriculture, industrial, and other legitimate uses.

Paragraph (6) of this subsection provides that this subsection is

not to prevent the application of section 10 of the Federal Water Pollution Control Act in any case to which subsection (a) of section 10 would otherwise be applicable, or to extend Federal jurisdiction over water not otherwise authorized by this act.

Paragraph (7) of this subsection prohibits any witness or other person from being required to divulge in connection with any hearing under this section any trade secrets or secret processes.

#### SUBPENA POWER IN ENFORCEMENT ACTIONS

Subsection (c) of section 5 of the House amendment amends redesignated section 10(e) of the Federal Water Pollution Control Act to add a new sentence which authorizes the Secretary in an enforcement action to administer oaths and to compel the presence and testimony of witnesses and the production of evidence by the issuance of subpoenas. It further provides that no person would be required to divulge trade secrets or secret processes and provides for payment of witness fees, mileage, and for the enforcement of subpoenas by district courts of the United States.

The proposed conference substitute does not contain such a provision.

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#### CONFORMING AMENDMENTS

Section 7 of the proposed conference substitute contains a number of technical conforming changes in the Federal Water Pollution Control Act made necessary by the amendments otherwise made by the conference substitute.

GEORGE H. FALLON,  
JOHN A. BLATNIK,  
ROBT. E. JONES,  
WILLIAM C. CRAMER,  
JOHN F. BALDWIN,

*Managers on the Part of the House.*

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#### 1.2h(4) CONGRESSIONAL RECORD, VOL. 111 (1965)

1.2h(4)(a) Jan. 28: Considered and passed Senate, pp. 1503-1519, 1521, 1525-1545

##### WATER QUALITY ACT OF 1965

The Senate resumed the consideration of the bill S. 4 to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to

provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pol-



lution of interstate waters, and for other purposes.

Mr. MUSKIE. Mr. President, on October 16, 1963, the Senate considered S. 649, a bill to amend the Water Pollution Control Act, as amended. It was a bill which had been subject to rigorous and extensive hearings, producing over 1,000 pages of testimony. It had been subjected to intensive study by the members of the Subcommittee on Air and Water Pollution and the members of the full Committee on Public Works. Members of both parties worked on revisions in the legislation. The final product, as reported to the Senate, retained the original objectives of the bill, but incorporated significant changes which were responsive to the hearing testimony and to the flow of ideas and discussions in the subcommittee. The bill was debated in some detail on October 16, being tested by Members of the Senate who had sincere doubts as to some of its provisions.

Following debate, the Senate passed S. 649 by a vote of 69 to 11, and of the 20 Members not voting, 15 announced themselves as favoring its passage. The House Public Works Committee reported an amended version during the closing days of the 88th Congress. However, no further action was taken by the other body.

In the months and weeks before the opening of the 89th Congress, the members of the Subcommittee on Air and Water Pollution and others interested in the Water Pollution Control Act reviewed S. 649 and the needed changes in the program. S. 4, which is now before the Senate, represents the consensus of that group. It has been cosponsored by 31 of my colleagues, including all members of the subcommittee in the 88th Congress. A hearing was held on the legislation, January 18, 1965. As reported to the Senate, it is identical with S. 649, with two deletions and several perfecting amendments which were adopted by the committee. I shall comment on those changes later

in my remarks.

I believe S. 4 is a sound and meaningful legislative approach to the enhancement of the quality of our national water resources. I believe its adoption will strengthen our pollution control and abatement program and will contribute to expanded and more effective efforts at the regional, State, and local level.

I want to express my appreciation to my colleagues who have made a substantial contribution to the development and perfection of S. 4. The chairman of the Committee on Public Works, the senior Senator from Michigan [Mr. McNAMARA], created the special Subcommittee on Air and Water Pollution and has given the subcommittee his backing and support. The ranking majority member of the subcommittee, the senior Senator from West Virginia [Mr. RANDOLPH], has devoted considerable time and effort to the legislation, offering many helpful suggestions.

The ranking minority member of the subcommittee, the senior Senator from Delaware [Mr. BOGGS], has been a creative and constructive partner from the very beginning. His patience and good will and his determination to achieve a reasonable meeting of the minds were essential to our success in the 88th Congress and today.

The exchanges on S. 649 and S. 4 have been healthy. The senior Senator from Kentucky [Mr. COOPER], whose disagreement with the majority of the committee has been recorded in our reports and in the debate, has contributed to a more complete understanding of the issues involved.

The development of S. 4, the Water Quality Act of 1965, has been a rewarding experience for me. It is, in my opinion, the product of creative dialog and legislative craftsmanship.

S. 4 is consistent with and supports the objectives outlined by President Johnson in his state of the Union message, in which he called for an expanded conservation program as part of our effort to achieve the Great Society:

For over three centuries the beauty of America has sustained our spirit and has enlarged our vision. We must act now to protect this heritage. In a fruitful new partnership with the States and cities the next decade should be a conservation milestone. \* \* \*

We will seek legal power to prevent pollution of our air and water before it happens. We will step up our effort to control harmful wastes, giving just priority to the cleanup of our most contaminated rivers. We will increase research to learn much more about the control of pollution.

These objectives and approaches stated by the President are reflected in S. 4.

As I mentioned previously, this legislation is, with the exception of two deletions and some perfecting amendments, identical to S. 649, as approved by the Senate on October 16, 1963, by a vote of 69 to 11. The two sections deleted were those relating to the control and abatement of pollution from Federal installations and the problem of non-degradable detergents.

[p. 1503]

The Federal installations section was eliminated from this bill because similar problems with respect to Federal installations are present in the field of air pollution, as well as water pollution. In addition, there were other matters relating to Federal activities in both fields which require separate and more complete consideration. Because of these factors it was decided to cover these matters in separate legislation.

The detergents section was deleted because the members of the soap and detergent industry have reported changes in their schedules for supplying the market with detergents which will degrade more readily than those presently on the market. In view of this change it was considered advisable to conduct additional hearings on the detergent problem to determine the type or need of corrective legislation.

S. 4 includes the following proposals:

First. To establish an additional position of Assistant Secretary of Health, Education, and Welfare to help the Secretary to administer the Federal Water

Pollution Control Act.

Second. To create a Federal Water Pollution Control Administration to administer sections 3, comprehensive programs; 4, interstate cooperation and uniform laws; 10, enforcement measures; and, 11, to control pollution from Federal installations, of the act.

Third. To authorize appropriations for the fiscal year ending June 30, 1965, and for 3 succeeding fiscal years in the amount of \$20 million a year for grants for research and development to demonstrate new or improved methods for the control of combined storm and sanitary sewer discharges.

Fourth. To increase grants to individual sewage treatment projects from \$600,000 to \$1 million, and to allow multimunicipal combinations grant increases from \$2,400,000 to \$4 million.

There is also a provision which provides a 10-percent bonus on construction grants for treatment plants where such construction is part of a comprehensive metropolitan plan.

Fifth. To provide procedures for the establishment of water quality standards applicable to interstate waters.

Sixth. To authorize action by the Secretary of Health, Education, and Welfare to initiate abatement proceedings where he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution of interstate or navigable waters and actions of Federal, State, or local authorities.

Seventh. Provisions for audits where Federal funds are utilized under the act, and provisions, under the Water Pollution Control Act, for appropriate application of the authority and functions of the Secretary of Labor with respect to labor standards.

The two perfecting amendments to the bill, as adopted by the committee, relate to the quality standards section of the bill. The first clarifies the procedure relating to the revision of water quality standards, so that the same provisions for hearings and consultation, followed

in establishing standards in the first instance, will be followed in the revision of those standards. There is, connected with that amendment, another amendment which provides a more logical sequence of paragraphs in the standards section.

The second committee amendment requires the hearing board, under the enforcement procedure, to give consideration to "the practicability of complying with such standards as may be applicable." This language is identical with that added to the court review section of the Water Pollution Control Act, as amended, in S. 649 in the 88th Congress. It is considered a clarification of a protection the committee intended to be present in the enforcement provisions of the act.

I have outlined, Mr. President, the provisions of S. 4, its origins, its development, and its senatorial sponsorship and support. In addition, this year, it has the support of the administration, as indicated in the January 18, 1965, letter to Chairman McNAMARA from the Secretary of Health, Education, and Welfare. In that letter he wrote, in part:

The overall purposes of S. 4 are highly desirable, particularly insofar as they are consistent with the President's goals and objectives noted above. We favor, therefore, the enactment of this legislation as necessary for the effective conduct of the national water pollution control program and the accomplishment of its important aims and purposes.

Mr. President, I ask unanimous consent that the full text of the Secretary's letter be printed at this point in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE,  
Washington, D.C., January 18, 1965  
Hon. PAT V. McNAMARA,  
Chairman, Committee on Public Works,  
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This letter is in response to your request of January 11, 1965, for a report on S. 4, a bill, to amend the Federal Water Pollution Control Act, as amended,

to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes.

In his state of the Union message, delivered to the Congress on January 4, 1965 (H. Doc. No. 1, 89th Cong.), President Johnson set forth important national goals and objectives for the prevention, control, and abatement of water pollution. The President proposed "that we end the poisoning of our rivers," and to this end he recommended legal power to prevent pollution before it happens and further asserted that we will step up our effort to control harmful wastes, giving first priority to the cleanup of our most contaminated rivers and will increase research to learn much more about the control of pollution. We view the purposes of S. 4 as consonant with these goals and objectives and therefore highly desirable.

The provisions of S. 4 are identical with those of S. 649, 88th Congress, passed by the Senate on October 16, 1963, except for the deletion of the provisions for permits for waste discharges from Federal installations and for measures for the control of synthetic detergents. Our comments on their identical provisions were submitted to you in our letter of October 11, 1963.

As stated therein, we fully support the provision of an additional Assistant Secretary position for this Department. This important provision will contribute to the necessary strengthening of the Office of the Secretary and will benefit all the Department's programs.

The proposed program of grants to assist municipalities in the development of projects which will demonstrate new or improved methods of controlling discharges of sewage and wastes from storm sewers and combined storm and sanitary sewers will aid greatly in resolving this very critical pollution problem. A recent report prepared by the Public Health Service, entitled, "Pollutional Effects of Stormwater and Overflows from Combined Sewer Systems; a Preliminary Appraisal," reveals the following significant aspects of this problem: Approximately 59 million people in more than 1,900 communities are served by combined sewers and combinations of combined and separate sewer systems. Storm water and combined sewer overflows are responsible for major amounts of polluting material in the Nation's receiving waters and the tendency with growing urbanization is for these amounts to increase. Both combined overflows and storm water contribute significant amounts of pollutional materials

to watercourses. These discharges affect all known water uses adversely in the receiving watercourses. Complete separation of storm water from sanitary sewers and treatment of all waste is the ultimate control measure to provide maximum protection to receiving waters. Total costs for complete separation based on scattered information are estimated to be in the \$20 to \$30 billion range. The report recommends demonstration projects identical in purpose with those specified in S. 4 as an attack on the problem and to provide information for future action. While we fully endorse the objectives of this provision of the bill, we wish to advise the committee that the administration will be proposing a community facility grants program. The organizational and coordinating arrangements for this and related existing programs are still under consideration, and will be dealt with in future recommendations to the Congress.

We agree with the desirability of increasing the existing dollar ceiling limitations on the amount of a single project grant from \$600,000 to \$1 million and from \$2,400,000 to \$4 million for a project in which two or more communities jointly participate. This amendment will provide a more equitable measure of assistance to those projects involving disproportionately higher costs and substantially stimulate the construction of necessary waste treatment facilities by larger communities, where the attendant needs are commensurately greater.

The bill provides that the amount of a grant for a project may be increased by 10 percent of that amount if the project is certified as conforming with a comprehensive plan for the metropolitan area in which the project is to be constructed. We believe that a direct financial incentive such as this is desirable to encourage municipalities to coordinate and conform, if practicable, to the facility plan for the metropolitan or regional area, both in the interests of effective water pollution control and because of the substantial savings in expenditures that may be realized to all levels of government as a result of such area coordination. This provision of S. 4 and the proposed increases in the dollar limitations for any single or joint construction project implement the recommendations of the Advisory Commission on Intergovernmental Relations in its October 1962 report on "Intergovernmental Respon-

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sibilities for Water Supply and Sewage Disposal in Metropolitan Areas."

The provisions for establishment of standards of water quality to be applicable to interstate waters would appear to have for their purpose the prevention of pollution before its inception. Sound water quality standards are capable of serving as valuable

guidelines for municipalities and industries in providing for effective treatment and disposal of their wastes so as to prevent pollution situations from arising. We are in agreement, therefore, as to the necessity and desirability of these provisions.

Such industries as the commercial shellfish and fishing enterprises, which are importantly engaged in the shipping and marketing of seafood products, are particularly susceptible to the deleterious effects of pollution. In addition to the immediate health hazards involved, the uncontrolled discharges of water matters in proximity to shellfish bed and commercial fish habitat areas inflict grave economic losses upon these industries through the resultant necessary closing of such areas to harvesting operations. The proposal of S. 4 directing the application of enforcement authority and procedures in such instances would provide corrective relief measures presently unavailable to those operators whose economic livelihood is imperiled through such pollution.

The overall purposes of S. 4 are highly desirable, particularly insofar as they are consistent with the President's goals and objectives noted above. We favor, therefore, the enactment of this legislation as necessary for the effective conduct of the national water pollution control program and the accomplishment of its important aims and purposes.

We are advised by the Bureau of the Budget that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely,

ANTHONY CELEBREZZE,  
Secretary.

Mr. MUSKIE. Mr. President, the provisions of S. 4 also have the support of the Federal Water Pollution Control Advisory Board, by resolutions adopted by the Board on June 12, 1963, and November 10, 1964. This distinguished panel of public-spirited citizens maintains a continuing relationship with the water pollution control program and has an intimate knowledge of its operation within the Public Health Service and the Department of Health, Education, and Welfare.

Mr. President, I ask unanimous consent that the names and titles of the members and the resolutions of the Board relating to the creation of a Water Pollution Control Administration in the Department of Health, Education, and Welfare be printed at this point in the

## RECORD.

There being no objection, the list was ordered to be printed in the RECORD, as follows:

## WATER POLLUTION CONTROL ADVISORY BOARD

Chairman, ex officio. Hon James M. Quigley, Assistant Secretary, Department of Health, Education, and Welfare, Washington, D.C.

Executive secretary Mr Robert C Ayers, Department of Health, Education, and Welfare, Washington, D.C.

Mr Earle G Burwell, former member, Wyoming State Stream Pollution Committee, Casper, Wyo.

Mr. M. James Gleason, commissioner, Multnomah County, County courthouse, Portland, Oreg.

Mr. Raymond A. Haik, attorney-at-law, Minneapolis, Minn.

Mrs Burnette Y. Hennington, national secretary, National Federation of Business and Professional Women's Clubs, Inc., Northside Station, Jackson, Miss

Mr. Gerald A. Jackson, vice president, Champion Papers, Inc., Chicago, Ill

Mr. Lee Roy Matthias, executive vice president, Red River Valley Association, Shreveport, La.

Mr Blucher A Poole, director, bureau of environmental sanitation, State board of health, Indianapolis, Ind.

Mr. William E Towell, director, Missouri Conservation Commission, Jefferson City, Mo.

Mr. William E Warne, director, California Department of Water Resources, Sacramento, Calif.

## RESOLUTION ADOPTED BY FEDERAL WATER POLLUTION CONTROL ADVISORY BOARD ON JUNE 12, 1963

Whereas the Federal Water Pollution Control Advisory Board was created by Congress and members are appointed by the President for the purpose of reviewing the water pollution problem of this country, appraising public opinion on the subject and making recommendations which would lead to the formation of policies which would effectuate better water pollution control throughout the Nation; and

Whereas there is now pending before the Congress legislation which would transfer the administration of the Federal water pollution control program out of the Department of Health, Education, and Welfare, and

Whereas there is also pending before the Congress legislation which would establish a separate administrative agency within the Department of Health, Education, and Welfare for the Federal water pollution control program; and

Whereas this Board is previously on record in favor of the establishment of such a separate administrative organization within the Department of Health, Education, and Welfare: Now be it

## Resolved—

1 That considering the availability of highly qualified water pollution control personnel now in the Department of Health, Education, and Welfare and considering the wealth of knowledge and experience accumulated within that Department in this area this Board strongly urges and recommends that the administration of water pollution control be retained within the Department of Health, Education, and Welfare, and

2 This Board specifically endorses and urges the adoption either by administrative action by the Secretary of Health, Education, and Welfare or by congressional enactment, that section of S 649 and H R. 3161 (or similar pending bills) which relates to the establishment of a separate administrative agency for water pollution control within the Department of Health, Education, and Welfare; and be it further

Resolved, That the Chairman of this Board is requested to bring the contents of this resolution to the attention of the Secretary of Health, Education, and Welfare and the chairman of the Senate Subcommittee on Water and Air Pollution and the chairman of the House Subcommittee on Rivers and Harbors and Public Works so that they may be fully appraised of this Board's deep concern for the need of the immediate upgrading of the water pollution control program within the Department of Health, Education, and Welfare

## RESOLUTION CREATING A WATER POLLUTION CONTROL ADMINISTRATION IN THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Resolved, That the Federal Water Pollution Control Advisory Board, in executive session this 10th day of November 1964, at Chicago, Ill., recommends the creation of a separate Water Pollution Control Administration within the Department of Health, Education, and Welfare.

Mr. MUSKIE. Mr. President, the proposed legislation has the support of the distinguished Governor of California, Edmund G. Brown, who testified before the committee. It is supported by the U.S. Conference of Mayors and other civic organizations. It is supported by the National Wildlife Federation and other conservation groups. Industrial representatives who appeared before the committee and who consulted with us

have indicated that while they may not agree with all of its provisions, they believe S. 4 is reasonable in its approach.

Mr. President, I believe S. 4 deserves the high priority accorded it by the administration and by the Senate leadership. Two years have passed since its basic provisions were presented to the Senate. A year and a quarter has passed since the Senate approved S. 649. The improvements that this legislation offers are needed today more than ever.

The need for the acceleration of sewage treatment plant construction and for the correction of the problem of combined sewers is no less urgent than when I introduced S. 649 in January of 1963, or when it passed the Senate in October of that year. As a matter of fact, the delay in enactment of legislation has created a greater backlog of needs in correcting the Nation's water pollution problems.

The committee recognizes that the increased authorizations in S. 4 do not go as far as some members would like. We are conscious of the problems confronting our larger cities where even the \$1 million project authorization contained in S. 4 will not approach 30 percent of the project cost. We are also conscious of the growing needs of smaller communities, where the cost of collection sewers—not eligible for aid under the Water Pollution Control Act—is often larger than that of the sewage treatment works. There are many other fiscal and developmental problems connected with the sewage treatment grant program which must be examined. But none of these questions can be considered adequately without giving attention to the problem of overall grant authorizations. It is the committee's intention to give timely and intensive study to this problem. The views of all interested parties will be solicited in an effort to arrive at a sound and fair total authorization and to correct any inequities which exist in the present grant program.

Today our older cities are faced with

the necessity of separating their combined storm and sanitary sewers, or devising means whereby the discharge of runoff from city streets is gradually fed through treatment plants to prevent overloading of treatment systems and the discharge of untreated sewage into public waterways. The correction of the problem of combined sewers requires huge expenditures on the part of communities. Current estimates place the cost of separation in the order of \$30 billion. The \$20 million annual authorization in S. 4 would help launch a research and development program to find

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improved methods of dealing with the combined sewage problem. Hopefully, this program will also cut the costs of corrective action.

For the program of sewage treatment facilities to be of greater benefit to our larger communities, the limitation on individual and multimunicipal grants needs to be raised. The present ceilings are unrealistic when applied to the considerably greater expenditures which a larger city must bear in installing necessary treatment works. In application, the grants approximate as little or less than 10 percent of the costs involved, and thus they fail to achieve what is at once a primary and necessary objective of the grant program—the incentive to develop local projects for the control and abatement of water pollution.

S. 4 would authorize the establishment of an additional Assistant Secretary to help in the responsibility of the Department to oversee this important sphere of activities. There would also be authorized a Federal Water Pollution Control Administration to carry out certain functions of the Federal Water Pollution Control Act, thus accomplishing two purposes:

First, the new Administration would elevate the status of our water pollution control and abatement programs to a more appropriate and effective level in the Department.

Second, it would free the Public Health Service to concentrate on its primary concern with health in the water pollution field, as it is in other areas.

The importance of establishing water quality standards in our interstate water system is *gaining more recognition and support*. While this would be a new provision in Federal legislation, it is by no means a new or novel approach to aiding in the improvement of water quality and in the proper management of our water resources. We all recognize that the availability of water of good quality is a necessity for our economic and industrial growth. It is essential to the achievement of the Great Society.

The development and application of water quality standards would enable us to establish objectives and guidelines on the use of our waters and to prevent the misuse and abuse of this vital resource.

Water quality standards would provide techniques which could, in many instances, help us to avoid the necessity for enforcement action. Under present law and procedures nothing is done until pollution has reached the point where it endangers the health or welfare of many people when there then are imposed unconscionable burdens upon industry and others responsible for dealing with it. Then abatement action is taken and efforts are made to correct a situation which could have been prevented if standards of water quality had been established; municipalities and industries could develop realistic plans for new plants or expanded facilities, without uncertainties about waste disposal limitations which may be imposed.

In my own State, as in others, our previously abundant shellfish producing waters have been immeasurably harmed through disposal of deleterious wastes. The economic losses to shellfishermen have been catastrophic. S. 4 could provide them with effective protection for the first time.

These, Mr. President, are the basic

provisions of the Water Quality Act of 1965, as amended by the committee. I urge the Senate to approve S. 4 as a major contribution to the quality of American life.

#### WATER POLLUTION MORE SERIOUS EACH YEAR

Mr. YARBOROUGH. Mr. President, I strongly support this legislation being brought before the Senate by the leadership of the distinguished junior Senator from Maine [Mr. MUSKIE].

Water pollution is high on the list of our urgent national priorities. Increasing population and industry will necessarily increase water pollution; increasing reuse of the scarce water supplies of a basin will compound pollution problems.

A recent survey showed a national backlog of over \$2 billion of waste treatment works needed to be built now; several hundred millions of dollars should be spent annually to keep population growth from increasing water pollution.

The bill before the Senate today is another modest improvement in the water pollution effort the Federal Government has been engaged in for several years. It provides research and development grants for work on the problems of combined storm-sewage systems, increases the maximum grants possible to communities under the sewage treatment works construction program, and improves the administrative authority over the water pollution program including procedures for establishing quality standards for interstate waters. All of these are reasonable and prudent steps that represent progress. Pure water is necessary for a healthy people. Impure water lowers the health level of a people, and increases the death rate. Clean water makes for clean people.

For all of us who labor here in Washington, the need for faster progress in water pollution prevention is illustrated by the Potomac River that so enhances the majesty of this great city. The

Potomac is a beautiful river—until one gets close to the stinking thing. So far as I am concerned, none of us can feel content with what has been done against water pollution until there are again bathing beaches on the Potomac within sight of the Capitol. Then we can feel that the needed job is being done.

I commend my colleagues who have labored so diligently in this field; I assure them of my support for continued efforts to combat water pollution across the Nation.

Mr. BOGGS. Mr. President, I wish to join with the distinguished chairman of the subcommittee, the very able junior Senator from Maine [Mr. MUSKIE], in the remarks he has just made regarding S. 4, the Federal Water Pollution Control Act Amendments of 1965. I also want to express my appreciation to him and other members of the committee for the great amount of work which has gone into the preparation of this legislation and its ultimate referral from the committee to the Senate floor for action.

As the Senate knows, an almost identical bill to this passed the Senate in the last Congress but, unfortunately, did not receive final consideration by the other body. The bill presently before the Senate is the result of many days of work by members of the committee and many conferences held between State governments, industries, and Federal officials. It is my considered opinion that in this legislation we have a good bill which will go a long way in protecting the wise use of our water resources.

As I think everyone is well aware, the waters of our Nation are one of our most precious natural resources. They are in fact essential to all aspects of our well-being.

With the population growth and the increasing uses of our available waters, their essentiality is becoming more and more evident.

I think it is also well to keep in mind, Mr. President, that commendable progress in pollution control has been made by industry, municipalities, States, re-

gional authorities, and the Federal Government; and it is only because of the scope, number, and complexity of the problems of pollution that I feel this legislation is timely and provides for a more realistic and effective water pollution control program.

As the distinguished Senator from Maine has pointed out, it provides for an "effective national policy for the prevention, control, and abatement of water pollution."

Much concern has been evidenced over the standards section of this legislation; therefore, I would like to make this comment. It is my firm belief that the establishment of standards as provided for in this legislation will reduce the need for enforcement proceedings and facilitate treatment programs because full knowledge would be available as to water quality needs. This authority to establish standards in appropriate cases does not extend the jurisdiction of the Federal Government over water not now covered by existing law. In fact, Mr. President, the members of the committee and the staff have worked diligently in preparing language to make it abundantly clear that the States, interstate agencies, and industries will be fully protected from any arbitrary action by a Secretary of Health, Education, and Welfare regarding established standards. Senators will note that the report as well as the language of the bill make it abundantly clear that the review authority contained in existing water pollution control laws shall take into consideration the practicability of complying with such standards as may be applicable.

(At this point Mr. TYDINGS took the chair as Presiding Officer.)

Mr. BOGGS. I should like to mention one further thing, Mr. President, and that is the fact that the proposed legislation, unlike S. 649 of the past Congress, does not include a section dealing with water pollution control at Federal installations. Both the chairman of the subcommittee, the junior Senator from



Maine, and I, along with others, have  
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introduced a separate piece of proposed legislation dealing with pollution abatement at Federal installations. I feel very strongly that legislation to control pollution at Federal installations is a "must," and that we at the Federal level must place our own house in order before we can expect others to do likewise. I would hope and believe that the Federal installations bill would receive early consideration by the subcommittee and that we would see it enacted into law in this Congress.

Again, Mr. President, let me most sincerely commend the junior Senator from Maine [Mr. MUSKIE], the chairman of our subcommittee, for his leadership in this field of water pollution control and for the many kindnesses and courtesies, he has extended to me during all of our deliberations in the creation of a meaningful proposal in the field of water pollution control.

I urge my colleagues in the Senate to consider this proposed legislation most favorably, and look toward its passage. This proposed legislation will be a reasonable and practical step toward the protection and wise use of our water resources.

I thank the Senator from Maine [Mr. MUSKIE], the distinguished Senator in charge of the bill, for yielding to me.

Mr. MUSKIE. I thank my good friend the Senator from Delaware for his helpful and useful statement, lucid as always, and for his kind, personal remarks.

Mr. MILLER. Mr. President, will the Senator from Maine yield?

Mr. MUSKIE. I yield.

Mr. MILLER. First, I commend the Senator from Maine for his excellent statement on the pending bill. The Senator will recall that last year, when a similar bill was considered by our Subcommittee on Air and Water Pollution Control, a considerable amount of attention was devoted to what might be called the problem of judicial review, with a

view to making very clear the procedure that would be followed if the bill became law. I should like to ask the Senator a few questions.

On page 9, the bill contains a provision indicating that violations are "subject to abatement in accordance with the provisions of this section." The section reference is to section 10 of the basic Federal Air and Pollution Control Act, a part of which is amended, along with additions, by the pending bill.

Mr. MUSKIE. The present section 8 will become section 10, if the bill is passed.

Mr. MILLER. That is correct.

Let us assume that action for abatement were taken because of what appeared to be a violation by some individual. What would be the first step involved?

Mr. MUSKIE. The first step would be the calling of a conference, notice of which would be given to States, State agencies, interstate agencies, industries, and municipalities. Any parties in interest would be brought into the conference for the purpose of considering all matters dealing with the problem of pollution in the waters involved. I emphasize that the waters must be interstate waters, under the act.

Mr. MILLER. If the conference procedure, which I presume would be relatively informal, did not result in an abatement, what would be the next step?

Mr. MUSKIE. The conference procedure would be informal. It would not be an adverse procedure in any sense at that point. Its purpose is to establish a factual basis upon which the Secretary may determine whether or not to proceed with an abatement order. The conference would make its report to the Secretary. The Secretary, following the conference, would be required, under the law, to prepare and forward to all water pollution agencies attending the conference a summary of the conference discussions.

In effect, this is a notice to the agencies involved, State and interstate, of the

findings of the conference on this very point.

The Secretary is then required to allow at least 6 months for the States or interstate agencies to act upon any recommendations he may make in connection with the conference report. The period is at least 6 months.

If at the conclusion of the period which he allows—and that period is stated, so that all parties are on notice—such remedial action has not been taken, the Secretary shall call a public hearing, to be held before a hearing board appointed by the Secretary.

Mr. MILLER. Do I understand that in the proceedings before that hearing board, it would be expected that the procedure would indeed be an adversary type procedure?

Mr. MUSKIE. Let me read the provision of the act. I am speaking of the present law, and not of S. 4. It reads:

Each State in which any discharge causing or contributing to such pollution originates and each State claiming to be adversely affected by such pollution shall be given an opportunity to select one member of the Hearing Board and at least one member shall be a representative of the Department of Commerce, and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. At least three weeks' prior notice of such hearing shall be given to the State water pollution control agencies and interstate agencies, if any, called to attend the aforesaid hearing and the alleged polluter or polluters. On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether pollution referred to in subsection (a) is occurring and whether effective progress toward abatement thereof is being made. If the Hearing Board finds such pollution is occurring and effective progress toward abatement thereof is not being made it shall make recommendations to the Secretary concerning the measures, if any, which it finds to be reasonable and equitable to secure abatement of such pollution. The Secretary shall send such findings and recommendations to the person or persons discharging any matter causing or contributing to such pollution, together with a notice specifying a reasonable time (not less than six months) to secure abatement of such pollution, and shall also send such findings and recommendations and such notice to the

State water pollution control agency and to the interstate agency, if any, of the State or States where such discharge or discharges originate.

I have read the provisions of the present law in detail in order to emphasize the point that the hearing board, established by the Secretary, does not in itself have the power to direct enforcement action against a polluter. The board is to hear the case as it is developed up to the time when the case is presented to it. Then the board is to make recommendations based upon its findings.

Mr. MILLER. The recommendations are to go to the Secretary. The Secretary, if he thinks such action is indicated, I presume, could then refer the matter to the Department of Justice for enforcement.

Mr. MUSKIE. Yes. The provision for not less than 6 months' notice, is to give a State or interstate agency an opportunity to move in with its own enforcement board. If they fail to act, in the case of a pollution of waters which is endangering the health and welfare of persons in a State other than those in which the discharge or discharges take place, the Secretary may request the Attorney General of the United States to bring a suit on behalf of the United States to seek abatement of the pollution.

Mr. MILLER. In that action, there would be what might be termed a judicial review. Is that not correct?

Mr. MUSKIE. Yes. This is the first adversary proceeding in the whole process, in the sense that we lawyers understand the term "adversary proceedings." It is at this point that the polluter is confronted with the enforcement power of the Government.

Mr. MILLER. At that stage of the proceeding, it would be proper for the person aggrieved and the person against whom the abatement action is being brought to argue the reasonableness of the standards under which the abatement action had been taken?

Mr. MUSKIE. Precisely.

Mr. MILLER. I understand further

that in this bill, we have specifically written in another matter than can be considered. It provides on page 10, subsection (d), that the practicability of complying with such standards as may be applicable is also relevant matter. Is that not correct?

Mr. MUSKIE. Yes. I ought to explain what the provision in the bill which the Senator has just read means. Under S. 4 as originally drawn and S. 649 as passed by the Senate, the court was given the power to consider the practicability of complying with the act. This language would give like power to a hearing board in connection with the functions we have described. I think the board had that power under S. 4 as written, but to make it clear, we have inserted it in the language in the section dealing with the powers of the hearing board.

Mr. MILLER. I appreciate the Senator's extended reply to my question. It will help in making clear what the legislative intention of this language is.

One further observation. The Senator has said that at least a 6-month delay must occur to give State agencies an opportunity to proceed in an abatement action. I assume that the procedures under the State laws involved would embrace judicial review. Is that correct?

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Mr. MUSKIE. I did not hear the last part of the question.

Mr. MILLER. I assume that the procedures under the State laws involved would admit of judicial review.

Mr. MUSKIE. Yes.

Mr. MILLER. So, either way, the aggrieved person, whether it be in a procedure before a State agency or a procedure under the law proposed by S. 4, has the assurance that there will be an opportunity for judicial review under which the reasonableness of the standards and practicability of compliance therewith will be considered?

Mr. MUSKIE. Yes.

Several Senators addressed the Chair.

Mr. MUSKIE. I yield first to the Senator from Kentucky [Mr. COOPER].

Mr. COOPER. I say to my friend from Iowa that the amendment which I will propose goes to the very point that has been discussed. I shall not discuss it at this time. I disagree wholly with the thesis on which the Senator from Maine bases his argument.

Mr. MUSKIE. I have been reading from the provisions of the present law. I have not interpolated any words of my own.

I yield now to the Senator from Illinois [Mr. DOUGLAS].

Mr. DOUGLAS. Mr. President, I wish to speak very briefly on another matter, but before I do so, I congratulate the Senator from Maine for taking up this very important issue. Increasingly we have interstate problems in dealing with water pollution. The Mississippi is a polluted stream, but eight or nine States are involved in the pollution, and it is difficult to obtain united action on this problem. The same problem exists on lower Lake Michigan as between Indiana and Illinois. The Senator from Maine has made a fine contribution to the solution of this problem.

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Mr. SYMINGTON. Mr. President, let me congratulate the Senator from Maine [Mr. MUSKIE] and the members of the Senate Public Works Committee for the speed with which they have considered and reported S. 4. Abatement of water pollution and improved standards of water quality control are most worthy objectives.

In Missouri, we are proud of the fact that we have made great progress in construction of sewage treatment plants, and thus the abatement of pollution of our interstate waters.

In this effort, however, some of our communities, particularly smaller communities such as Caruthersville, Mo., are finding it extremely difficult, if not impossible, to finance the necessary sewage collection and treatment plants.

A community in an economically depressed county, Caruthersville is a city of approximately 8,600 with a high rate of unemployment. Of the 10,443 households in the county, 1,013 are on welfare and 3,518 have been receiving surplus food.

This city is under order from the Missouri Water Pollution Control Board to stop dumping raw sewage into the Mississippi River. The citizens want to meet this requirement. In fact, in August of 1963, they voted by a majority of 659 to 4 to authorize the sale of revenue bonds to

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pay \$484,000 of the estimated cost of \$908,000 for construction of the sewage treatment plant, interceptor and outfall mains, plus some extension and modernization of the present sewage system.

The city was counting on the accelerated public works program for grants of \$424,000 to pay the balance of the cost. Unfortunately money was exhausted before these worthy applications could be approved.

The city has filed an application for 30 percent of the cost of interceptor, outfall and treatment works, a cost estimated at \$657,000; but it does not appear that such a grant would provide sufficient funds to do the job.

Mr. President, I can understand that in the effort to move rapidly on this present bill, S. 4, the Public Works Committee did **not go into problems** such as that presented by the city of Caruthersville.

I do note, however, that on page 7 of the committee report—Senate Report No. 10—on this bill that the committee states:

It is the intention of the committee to give early and thorough attention to the financial and technological problems confronting communities, large and small, as they endeavor to control and abate municipal sewage.

The committee is confident that out of the experience we have gained under the present act and from information derived from hearings and technical studies it will be able to develop a sound and expanded program of

pollution control and abatement grants designed to meet realistic goals of water quality enhancement.

I would ask the distinguished Senator from Maine if this means that consideration will be given to an increase in the percentage of the allowable grant on the cost of sewage treatment plants and the necessary interceptor and outfall sewage mains connected thereto?

Mr. MUSKIE. Let me say to the Senator from Missouri that it is our desire and intent to go into that question. So far as the larger States are concerned, they are not getting a sufficiently large proportion of the total cost of sewage treatment projects from the Federal Government. I believe that is a legitimate concern. In the development of this program, we have moved toward higher and higher ceilings in that respect, but we still have a problem.

Then there is the question of the percentage of Federal support, particularly in distressed areas. That has been a problem.

The accelerated public works program has been of great assistance in this connection. We have been able to generate Federal grants of 50 percent or more in the past. That experience will be useful to our committee in considering changes in the formulas in the Federal Pollution Act itself.

I assure the Senator from Missouri that it is the full intention of the committee to go into this subject thoroughly, in the hope of developing proposals which will help relieve communities and States, to an even greater extent than in the past, of the burden of dealing with this problem.

Mr. SYMINGTON. I thank the able Senator from Maine. May I ask if this is planned to be done fairly soon?

Mr. MUSKIE. We intend to do it in this session.

Mr. SYMINGTON. In this session?

Mr. MUSKIE. Yes.

Mr. SYMINGTON. I thank the chairman. I appreciate his courtesy in acceding to my request in this particular

case, and I am sure that will be true in other cases that will arise in the State of Missouri.

Mr. MUSKIE. Yes; and I expect to hear other remarks on this subject today.

Mr. STENNIS. Mr. President, I, too, commend the Senator from Maine and his subcommittee and the full committee for the very fine work they have done on this timely subject and troublesome question, to which some solution must be found.

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#### WATER QUALITY ACT OF 1965

The Senate resumed the consideration of the bill S. 4, to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes.

Mr. TOWER. Mr. President, I wish to propose an amendment to the bill S. 4.

The PRESIDING OFFICER. The Senate must first dispose of the committee amendments.

Mr. TOWER. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. TOWER. Have not the committee amendments been disposed of?

The PRESIDING OFFICER. They have not. The first committee amendment will be stated.

The LEGISLATIVE CLERK. On page 7, line 14, it is proposed to strike out the word "and"—

Mr. MUSKIE. Mr. President, I move that the committee amendments be considered en bloc, and that the bill as thus amended be considered as original text for the purpose of amendment.

The PRESIDING OFFICER. Is there objection to the request of the Senator from Maine?

There being no objection, the committee amendments were considered and agreed to en bloc, as follows:

\* \* \* \* \*

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#### UNANIMOUS-CONSENT AGREEMENT TO LIMIT TIME

Mr. MANSFIELD. Mr. President, will the Senator yield?

Mr. TOWER. I yield to the Senator from Montana.

Mr. MANSFIELD. I should like to propound a unanimous-consent request without the Senator from Texas losing his right to the floor.

Mr. President, I ask unanimous consent that on the Tower amendment in the nature of a substitute there be a time

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limitation on debate of 1 hour, 30 minutes to be under the control of the Senator from Texas [Mr. TOWER] and 30 minutes to be under the control of the Senator in charge of the bill, the distinguished Senator from Maine [Mr. MUSKIE].

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. TOWER. Mr. President, I offer the amendment which I send to the desk and ask to have stated.

The PRESIDING OFFICER. The amendment of the Senator from Texas will be stated.

The legislative clerk proceeded to read the amendment.

Mr. TOWER. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

#### AMENDMENTS BY MR. TOWER

Strike out all after the enacting clause and insert in lieu thereof the following:

"That (a) (1) section 1 of the Federal Water Pollution Control Act (33 U.S.C. 466) is amended by inserting after the words Section 1, a new subsection (a) as follows:

"(a) The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy

for the prevention, control, and abatement of water pollution.'

"(2) Such section is further amended by redesignating subsections (a) and (b) thereof as (b) and (c), respectively.

"(3) Subsection (b) of such section (as redesignated by paragraph (2) of this subsection) is amended by striking out the last sentence thereof and inserting in lieu of such sentence the following: 'The Secretary of Health, Education, and Welfare (hereinafter in this Act called the "Secretary") shall administer this Act and, with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him, shall supervise and direct the head of the Water Pollution Control Administration created by section 2 and the administration of all other functions of the Department of Health, Education, and Welfare related to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe.'

"(b) Section 2 of Reorganization Plan Numbered 1 of 1953, as made effective April 1, 1953, by Public Law 83-13, is amended by striking out 'two' and inserting in lieu thereof 'three', and paragraph (17) of subsection (d) of section 303 of the Federal Executive Salary Act of 1964 is amended by striking out '(2)' and inserting in lieu thereof '(3)'."

Sec. 2. Such Act is further amended by redesignating sections 2 through 4 and references thereto, as sections 3 through 5, respectively, sections 5 through 14, as sections 7 through 16, respectively, by inserting after section 1 the following new section:

"FEDERAL WATER POLLUTION CONTROL  
ADMINISTRATION

"Sec. 2. Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the 'Administration'). The head of the Administration shall be appointed, and his compensation fixed, by the Secretary, and shall, through the Administration, administer sections 3, 4, 6, 8, 10, and 11 of this Act and such other provisions of this Act as the Secretary may prescribe. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge the Administration's functions and may for that purpose use funds available for carrying out such functions.

"Sec. 3. Such Act is further amended by inserting after the section redesignated as

section 5 a new section as follows:

"GRANTS FOR RESEARCH AND DEVELOPMENT

"Sec. 6. The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith.

"Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary, (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary, (3) no grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes.

"There are hereby authorized to be appropriated for the fiscal year ending June 30, 1965, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose of making grants under this section. Sums so appropriated shall remain available until expended. No grant shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year."

"Sec. 4. (a) Clause (2) of subsection (b) of the section of the Federal Water Pollution Control Act herein redesignated as section 8 is amended by striking out '\$600,000,' and inserting in lieu thereof '\$1,000,000.'

"(b) The second proviso in clause (2) of subsection (b) of such redesignated section 8 is amended by striking out '\$2,400,000,' and inserting in lieu thereof '\$4,000,000.'

"(c) Subsection (f) of such redesignated section 8 is redesignated as subsection (g) thereof and is amended by adding at the end thereof the following new sentence: "The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 FR 3176, 64 Stat. 1267, 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948, 40 U.S.C. 276c)."

"(d) Such redesignated section 8 is further

amended by inserting therein, immediately after subsection (e) thereof, the following new subsection

"(f) Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 10 per centum of the amount of such grant for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan area. For the purposes of this subsection, the term "metropolitan area" means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget, except as may be determined by the President as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and other activities, which in the opinion of the President lends itself as being appropriate for the purposes hereof."

"Sec 5 (a) Redesignated section 10 of the Federal Water Pollution Control Act is amended by redesignating subsections (c) through (i) as subsection (d) through (j)

"(b) Such redesignated section 10 of the Federal Water Pollution Control Act is further amended by inserting after subsection (b) the following

"(c) (1) In order to carry out the purposes of this Act, the Secretary may, after consultation with officials of the State and interstate water pollution control agencies and other Federal agencies involved, and with due regard for their proposals, prepare recommendations for standards of water quality to be applicable to interstate waters or portions thereof. The Secretary's recommendations shall be made available to any conference which may be called pursuant to subsection (d) (1) of this section, and to any hearing board appointed pursuant to subsection (f) of this section, and all or any part of such standards may be included in the report of said conference or in the recommendations of said hearing board.

"(2) The Secretary shall, when petitioned to do so by the Governor of any state sub-

ject to or affected by the water quality standards recommendations, or when in his judgment it is appropriate, consult with the parties enumerated in paragraph (1) of this subsection concerning a revision in such recommended standards

"(3) Such recommended standards of quality shall be such as to protect the public health and welfare and serve the purposes of this Act. In establishing recommended standards designed to enhance the quality of such waters, the Secretary shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses

"(4) The Secretary shall recommend standards pursuant to this subsection with respect to any waters only if, within a reasonable time after being requested by the Secretary to do so, the appropriate States and interstate agencies have not developed standards found by the Secretary to be consistent with paragraph (3) of this subsection and applicable to such interstate waters or portions thereof

"(5) No standard of water quality recommended by the Secretary under this subsection shall be enforced under this Act unless such standard shall have been adopted by the Governor or the State water pollution control agency of each affected State

"(6) Nothing in this subsection shall (A) prevent the application of this section to any case to which subsection (a) of this section would otherwise be applicable, or (B) extend Federal jurisdiction over water not otherwise authorized by this Act"

"(c) Paragraph (1) of redesignated subsection (d) of the section of the Federal Water Pollution Control Act herein redesignated as section 10 as amended by striking out the final period after the third sentence

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of such subsection and inserting the following in lieu thereof: "or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities."

"(d) Redesignated subsection (h) of the section of the Federal Water Pollution Control Act herein redesignated as section 10 is amended by inserting after the word 'practicability' in the second sentence thereof, the words 'of complying with such standards as may be applicable'

"Sec 6 The section of the Federal Water Pollution Control Act herein redesignated as section 11 is amended by inserting '(a)' after 'Sec 11' and by inserting at the end of such section the following

"(b) No interceptor drain shall be con-

structed or financed, in whole or in part, by any department, bureau, agency, or instrumentality of the United States to carry waste drainage water or treated sewage effluent from the service area of any reclamation project constructed in whole or in part by the Secretary of the Interior within the State of California to a termination point in the San Francisco Bay, the San Pablo Bay, the Suisun Bay, the waters of the Sacramento-San Joaquin Delta, or any channels lying between these bodies of water, unless the Secretary of Health, Education, and Welfare has first made a determination, based upon a study, that the anticipated discharge water from such interceptor drain will not, in the foreseeable future, pollute or increase the salinity, chloride, or pesticide content or impair usability for domestic, industrial, or irrigation purposes of the receiving water in the vicinity of the location where the interceptor drain is terminated, and Congress is given notice of such determination. The Secretary of Health, Education, and Welfare shall consult with the California regional water pollution control boards for the San Francisco Bay region and the Central Valley region before making the determination and shall give consideration to the recommendations and findings of such regional boards.

"Sec 7. The section of the Federal Water Pollution Control Act hereinbefore redesignated as section 12 is amended by adding at the end thereof the following new subsections:

"(d) Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit

"(e) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act."

"Sec 8 (a) Section 7(f) (6) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out 'section 6(b) (4)' as contained therein and inserting in lieu thereof 'section 8(b) (4)'."

"(b) Section 8 of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out section 5' as contained therein and

inserting in lieu thereof 'section 7'.

"(c) Section 10(b) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out 'subsection (g),' as contained therein and inserting in lieu thereof 'subsection (h)'."

"(d) Section 10(i) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out 'subsection (e)' as contained therein and inserting in lieu thereof 'subsection (f)'."

"(e) Section 11(a) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out 'section 8(c) (3)' as contained therein and inserting in lieu thereof 'section 10(d) (3)' and by striking out 'section 8(e)' and inserting in lieu thereof 'section 10(f)'."

"Amend the title so as to read 'An Act to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize recommendations for standards of water quality, and for other purposes.'"

Mr. TOWER. Mr. President, I intend to make only a brief presentation. I intend to ask for the yeas and nays; therefore, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MANSFIELD. Mr. President, on the Tower amendment in the nature of a substitute, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. TOWER. Mr. President, I intend to be relatively brief; however, other Senators may wish to speak on the amendment, so I ask unanimous consent that the time for the quorum call not be charged to either side.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. TOWER. Mr. President, my proposal is identical with S. 649, as reported from the House Committee on Public Works last year.

The substitute can be easily described



and understood. It simply removes from the Secretary the authority to promulgate standards of water quality. The Secretary is, however, granted authority to make recommendations for these water quality standards, although no such standard may be enforced under the act unless the standard has been adopted by the Governor or State water pollution agency of each affected State.

Mr. President, as the minority views on S. 4 point out, the proposed Federal Water Pollution Control Act, particularly with the discretionary authority conferred up the Secretary, is opposed by a large number of States.

Further, State water control agencies have not had ample opportunity to express their views before the Senate Public Works Committee.

Mr. President, the matter of water quality standards is one that depends on State and regional circumstances, thus basically, the setting of such standards is a function for State and regional agencies.

The Texas Water Pollution Control Board is opposed to S. 4 because of the vast power that would be given to a new Federal agency. The Texas Water Agency fears the encroachment into an area that has always been reserved to State and local agencies.

Mr. President, I ask unanimous consent to have printed at this point in the RECORD, with accompanying material, the statement of Joe D. Carter, chairman, Texas Water Pollution Control Board, accompanied by David E. Smallhorst, executive secretary, Texas Water Pollution Control Board, made before the House Committee on Public Works. Many other State agencies have expressed similar opinions.

There being no objection, the statement and accompanying material were ordered to be printed in the RECORD, as follows:

STATEMENT OF JOE D. CARTER

I have with me today Mr. David Smallhorst who is the executive secretary of the Texas

Water Pollution Control Board who can field some of these difficult questions that you all toss out every once in a while.

Mr. WRIGHT: Mr. Smallhorst, we are glad to have you with us, sir.

Mr. SMALLHORST: Thank you, sir.

Mr. CARTER: The State of Texas, not being blessed with an abundance of water as some other States, has traditionally held water in high regard and great respect, adhering to the philosophy that water should be maintained in as high a degree of purity as possible.

Texas has been and is continuously moving to assume the responsibility of pollution control within its boundaries and cooperating with its neighboring States on border streams.

The preponderance of testimony presented to the Subcommittee on Natural Resources and Power of the Committee on Government Operations at the Southwest regional hearing, December 6-7, 1963, in Austin, Tex., indicated quite strongly that "no additional Federal water pollution control legislation is needed at this time."

The Texas Water Pollution Control Board concurs in this, and therefore, submits this statement in opposition to S. 649 and related bills.

The Texas Water Pollution Control Board is opposed to S. 649 because it unquestionably would place a great deal of power and authority in the hands of a new Federal agency which would have far-reaching effects threatening encroachment into a governmental area heretofore reserved to the State and local agencies.

Since the beginning of the current Federal water pollution control law in 1956, administration of the program has been competently carried out by the U.S. Public Health Service, and Texas has always enjoyed excellent working relationships with that agency. It is difficult to rationalize, therefore, the advantage which might be gained by any such drastic change in administration as authorized in S. 649.

The Texas Water Pollution Control Board is seriously concerned about and is opposed to the proposal in S. 649 which would authorize the Federal Government to establish standards of water quality. This is a matter depending entirely upon State and regional circumstances and is, therefore, basically a function of State and regional agencies.

Texas is proud of the close cooperation always received from the neighboring States when interstate waters become involved, and such situations have always been handled in a most friendly and effective manner.

It is obvious that quality standards which would be applicable to a "water rich" State would certainly not be applicable to a "water poor" State. There looms, therefore, the very difficult and time-consuming problem of es-

establishing adequate water quality standards

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on any given stream, not to mention the gigantic task this implies when imposed on a nationwide basis.

The Texas Water Pollution Control Board is charged by the legislature to issue permits for all waste discharges in the State, and an elaborate surveillance and enforcement program has been developed to back up this permit system. Hence, if this Federal law were passed, it would appear there would be a duplication of effort and a needless expenditure of Federal funds. This does not appear to be consistent with the present economy move of the administration, nor would it be conducive to unification of effort.

Pollution abatement is something that cannot be achieved instantaneously but tremendous inroads have been made during recent years, and the machinery for reaching a solution to this problem is currently operational. Inasmuch as amendments were made to the Federal water pollution control law as recently as 1961, it is believed the present act, as amended, has not been in effect a sufficient length of time to indicate the need for further "patch work." Obviously, changing the basic "ground rules" at such frequent intervals does not contribute to a healthy administrative atmosphere. Drastic administrative revisions as proposed in S. 649 might result in retrogression and possibly confusion in the entire program rather than a desirable acceleration of progress.

It is for these reasons the Texas Water Pollution Control Board recommends that no action be taken on S. 649 and related bills which proposes to amend the present Federal Water Pollution Control Act.

Mr. WRIGHT: Mr. Carter, I note that you have appended to your statement a copy of the testimony presented to Jones subcommittee in Austin on December 6 and 7.

Mr. CARTER: Yes, sir.

Mr. WRIGHT: Since that is a subcommittee of another committee of the House, I wonder if it would not be appropriate for us simply to make this additional statement a part of our record at this point.

Mr. CARTER: I would appreciate that, Mr. Chairman, and would like to incorporate our entire statement by reference.

Mr. WRIGHT: Without objection, then, it will be so ordered.

Mr. WRIGHT: Joe—may I call you Joe?—I would like to ask you one thing here. I notice that you are basically in opposition to what you refer to as patchwork. You do feel that the present program is working effectively?

Mr. CARTER: We feel it is in Texas, Congressman WRIGHT. I do not know how it is

working in the other States. We feel we have an effective program in cooperation with other Federal agencies in Texas.

Mr. WRIGHT: When the grants program was first inaugurated, there was some apprehension expressed in the committee and on the floor of the House, based on the fear that the presence of Federal matching funds to assist in the most severe cases might in fact discourage some communities and municipalities undertaking a solution of their own problems individually and slow down, rather than accelerate, the cleaning up of our streams. You do not feel that that has been the case, do you?

Mr. CARTER: No, sir.

Mr. WRIGHT: Would you say that the programs as such as accelerated and encouraged and stimulated a great deal of activity which has been needed for a great many years?

Mr. CARTER: Unquestionably.

Mr. WRIGHT: Now, with respect to further amending the law at this time, I have in question that your basic objection, like that of so many representatives of agencies of our States, relates primarily to the establishment of broad national standards and the conferring upon the Secretary the power to make those unvarying standards.

Is this really the crux of your opposition?

Mr. CARTER: That is really the crux of our argument, Congressman WRIGHT.

Mention was made earlier, I believe by Mr. BLATNIK, with respect to the fact that the Secretary was only going to set these standards if the State or local agencies weren't doing a good job. That might be the intention but the language of the act is such, as was brought out by Congressman HARSHA, that he is the sole judge on this. The big print in the bill might leave that impression but the little print kind of takes it away.

Mr. WRIGHT: In other words, the provision as is presently contained in the bill would vest in the Secretary, the authority to determine whether, in his judgment, the States had done a good job?

Mr. CARTER: Dictatorial powers.

Mr. WRIGHT: This does give him the power to set standards, of course.

With respect to the general proposal in section 12 of the bill, I would like to get your views and those of Mr. Smallhorst about the need for additional liaison between the Secretary and the national manufacturers of detergents and with respect to increasing efforts to find detergents with greater decomposability.

Mr. CARTER: I might say, Mr. WRIGHT, that there is no legislation needed for such a program. That could be handled by your Health, Education, and Welfare agency now in cooperation with industry. I see no need for Congress to take action.

Mr. WRIGHT: This authorizes the creation of a technical committee.

Mr. CARTER That could be created by appointment of the Secretary of Health, Education, and Welfare in cooperation with the industries of the States.

Mr. WRIGHT I am not certain of the breadth of his authority in that regard. It might be that he could create an additional secretary now.

Mr. CARTER The point I mention is that he could call industry and say, Let others get together and try to work out this problem of detergents. They are doing it now. Industry is working on this problem. They have found a solution to it. It is just a question of getting this new formula they have worked out into operation. I think industry will solve this problem very shortly.

Mr. WRIGHT I am sure we do applaud the efforts on the part of industry and any other scientists who may be involved in eliminating this particular problem as soon as possible.

Are there any questions?

Mr. SCHWENGEL I have one.

I wish to commend the gentleman for his fine statement and position on this problem. I know you are wary of Federal Government authority to establish standards of water quality. Now, you have that right in the State of Texas?

Mr. CARTER Yes, sir.

Mr. SCHWENGEL You establish the standard.

Will you give that to us so that we will have that part of the record?

Mr. CARTER We are very much like Michigan. Our standard is a policywide standard in the sense that all applications for permits which we pass on we are dedicated to the proposition of maintaining the purity of the stream. Under any permit we issue to an industry or municipality, the effluent they contribute to the stream must not deteriorate the quality of the stream from its existing condition.

Then we propose later to come in with those industries and municipalities whose effluent is not quite up to the quality we would like to see and we will move in and amend the permits they have at the present time to require a better quality of effluent.

I might say on standards with respect to municipal effluent. Mr. Smallhorst can probably give you the answer.

Mr. SCHWENGEL I wish you would continue on that. This is a very important aspect.

Mr. SMALLHORST The board since its creation in 1961 has followed the policy of requiring what we call complete treatment, producing an effluent of a quality to get technical here, of 20 parts per million BOD, 120 parts total solids and chlorination of 15 parts per million residual after 30 minutes contact. The board is taking this across the board on a statewide basis.

I might say also that as far as Texas is concerned, every city in the State that has a sewage system has some type of sewage treatment plant with the exception of three. This is mentioned in our Jones committee statement. The three towns that do not have a treatment plant, the total population is about 30,000 and they now have active plans underway to correct this situation.

So that our problem, you might say, is more of one not of building plants but to prevent the discharge of raw sewage, but to keep the plants that we have up to date and adequate for the population explosion that we are expecting in the area.

Does that answer your question, sir?

Mr. SCHWENGEL Yes. Your policy, then, is one of maintaining the present quality of the water in the streams?

Mr. CARTER Yes, sir.

Mr. SCHWENGEL There are areas, especially in Iowa, where we need to improve the water and with this kind of program this would not do this. I ask you, you probably have this kind of situation in Texas. What do you do about those areas where you need improvement?

Mr. CARTER We propose to move in the trouble areas as soon as possible and require not only the municipalities but also the industries to improve the quality of the effluent they are now discharging.

Mr. SCHWENGEL What is your policy with reference to industry? Do you force them to do it right now or do you give them a period of time?

Mr. CARTER We give them a period of time, of course. We try to be rational about it. As Mr. Smallhorst pointed out, this pollution legislation in Texas is rather new. They had a grandfather clause in it which permitted those making discharges to continue to do so as of the type they were discharging in 1961.

We propose to come into those trouble areas, as I pointed out, and try to correct what we consider bad situations.

Mr. SCHWENGEL At the present time, it has to be mostly by negotiation, though, doesn't it? Or do you have a law?

Mr. CARTER We have a law. It is \$200 a day fine for continuation of any discharge which the pollution board says they should not be discharging. And we have the injunction process, too.

Mr. SCHWENGEL What do you do in a situation like this where an industry has moved in because of an invitation from the community with certain assurances about disposal over a period of years?

Mr. CARTER We have run into that problem when Campbell Soup came into Paris, Tex., with an effluent discharge program that did not quite meet the standards we thought should be met. Through discussions with the management, we worked out what we

consider an acceptable practice

Mr. SCHWENGEL In that case, you resorted to negotiations.

Mr. CARTER Yes, sir.

Mr. SCHWENGEL You probably could not resort to law, then, in that case?

Mr. CARTER We could have, had the negotiations failed. But we feel it is best to talk these things out with folks.

Mr. HARSHA. Mr. Carter, as I understand, it is the position of the Texas Water Pollution Control Board that no amendments are necessary at this time to the Water Pollution Control Act.

Mr. CARTER. Exactly.

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Mr. HARSHA. If amendments are to be made to it, would you favor amendments that expand the research program under that act and possibly increase the construction grants but not go any further than that?

Mr. CARTER. Mr. HARSHA, personally, I do not see why legislation would be needed. That would come under the heading of appropriations.

Mr. HARSHA. There are some limitations under the construction grant, the amount that a grant may be, and to certain types of areas. Then there is a limitation on the amount of grant. I think that is 30 percent of the construction project.

Mr. CARTER. I would answer that and this is my personal answer and not for the pollution board. We are doing very well under the program. I see no reason to change it.

Mr. HARSHA. Thank you.

I have one other thing. What is Texas doing in the oil-field brine situation?

Mr. CARTER. That is my biggest headache. The pollution board at the present time is issuing permits for the disposal of oilfield brine. We sent out 70,000 applications here a few weeks ago to the oil operators who in turn are returning them indicating how much oilfield brine each well is producing, how they are disposing of it, and so forth. We are in the process of holding hearings with a view of what we term "no pit law," you can't put the salt water you are disposing of into an open unlined pit.

One area that we are having our biggest hearing on is what we call the area overlaying the Ogallala formation in west Texas which covers around 47 counties. These hearings are in progress.

We have been working closely with the oil industry, Mid-Continental Oil & Gas Association, and all the representatives of the oil companies, trying to come up with procedures to get rid of this salt water by injection primarily, and that is not the solution to the problem in its entirety because you must be very careful in injecting this

brine into the subsurface. You must have these injection wells properly cased. You must be careful about the pressure under which this salt water is injected.

We have closed two counties, three counties, issued orders where they cannot use these open pits for salt water disposal purposes. It is a tremendous job. With 70,000 less, producing less.

Mr. HARSHA. Is there any research program going on, either conducted by the State or industry to develop a method of disposal?

Mr. CARTER. The State and industry are working together to come up with what we consider proper injection procedures. We have just about got together on it. There is a little area of disagreement. We feel that through this cooperative effort we will arrive at a solution to the problem. It is a tremendous job.

Mr. HARSHA. Thank you.

I have no further questions.

Mr. WRIGHT. Thank you very much, Mr. Smallhorst. We greatly appreciate your having come and given us the benefit of your experience and following and background.

Mr. SMALLHORST. Thank you.

TEXAS WATER POLLUTION CONTROL BOARD  
(Abstract Statement presented to the Jones Subcommittee on Natural Resources and Power of the Committee on Government Operations, southwest regional hearing, December 6-7, 1963, Austin, Tex.)

#### PHYSICAL CHARACTERISTICS OF TEXAS AFFECTING WATER POLLUTION CONTROL

In order to fully appreciate some of the water quality or water pollution control problems of Texas, some knowledge of the physical characteristics of the State itself is desirable.

1 Texas is big. Over 264,000 square miles in area. This presents obvious administrative problems in surveillance and water quality monitoring activities and dictates the type of cooperative program which has been developed over the years.

2 Texas is a water-scarce State, with average annual rainfall ranging from less than 10 inches on the west to about 50 inches on the east. This is a wide variation and profoundly affects surface runoff in Texas river systems.

3 Evaporation rates exceed rainfall rates. This indicates generally arid conditions with resultant water losses due to evaporation and definitely affects water quality.

4 Most of the river systems of Texas are intrastate, with the Canadian, the Red, the Sabine, and the Pecos being the only interstate rivers and the Rio Grande being an international boundary. Interstate compacts are in effect on the Pecos and Sabine Rivers, a commission is developing an agree-

ment on the Red River, and the waters of the Rio Grande are under the immediate control of the International Boundary and Water Commission.

5. In general, the river systems of Texas head in the western areas of the State—the most arid areas—and flow in a southeasterly direction to the gulf. In some of the western headwater areas natural minerals tend to contribute to deterioration in quality of the runoff water.

6. Texas relies heavily upon its underground water resources. Protection of the quality of this water supply source is of vital importance. Also the effect of return flows from these underground sources upon the quantity and quality of surface river systems is a matter of interest.

7. In Texas, areas of population concentration are located at, or near, the headwaters of some of the major river systems. This feature complicates the water quality control picture not only as to furnishing these areas with adequate water supply sources, but also concerning the downstream effect of return "used" waters upon the river system.

8. The production of oil and gas in Texas has been developed generally on a statewide basis so that the disposal of the byproducts of this industry (oil- and gas-field waste) is a matter of interest in every river basin of the State.

9. Concentration of the major manufacturing industries of Texas is along the gulf coast with waste discharges to tidal waters, hence the resultant problem is different than where such discharges are to fresh waters.

#### TEXAS WATER POLLUTION CONTROL PROGRAM

The initial water pollution control statute of Texas was passed in 1917 vesting the authority for enforcement primarily with the State health department. In 1961, the State legislature enacted a new law codified as article 7621d creating a water pollution control board comprised of three ex officio members and three appointive members.

This law also established a permit system wherein all wastes discharged into or adjacent to the waters of the State must be in accordance with a valid permit issued by the board. This board is now completing its second year of operation, and in this relatively short time, considerable progress has been made and some general observations can be made as to the effectiveness of this type of administration.

1. The initial phase of setting up the machinery for operation under the new law is just now being completed—after establishing rules, regulations, and modes of procedure for obtaining permits—in that most all "statutory" or "grandfather" permits have been issued for municipal and industrial discharges. Applications for oil and gas

waste discharges have been issued by the board. In this process it has been noted that numerous corrective measures are being obtained by mutual agreement and the planning of needed improvements is being initiated.

2. Water-pollution-control committees of interested groups have proved to be invaluable in assisting the board in setting up this basic machinery. These groups included the Texas Water and Sewage Works Association, the Texas Water Pollution Control Association, the Texas Water Conservation Association, The Texas Manufacturers Association, the Texas Chemical Council, the Texas Society of Professional Engineers, and the Texas Public Health Association. Close communication with these groups is deemed vital in assuring the cooperation required for a successful program.

3. By relying upon the cooperating State agencies (water commissions, parks and wildlife, and the health department) for technical and field services, duplication of effort and service is eliminated, with a considerable financial saving to the State.

4. In its short period of operation the board has held public hearings and has issued orders relative to municipal, industrial, and oil- and gas-field waste discharges. The board has initiated a survey of the Galveston Bay waters to obtain needed basic data for the establishment of water quality objectives in this vast area involving some 511 square miles of water surface. One small segment of this survey is the Clear Lake watershed which includes the NASA development complex, and another area is the industrial complex along the Houston ship channel.

5. Clear Lake has been determined by the board to be conserved as a recreational lake and intensive studies are underway toward this end. Determinations will be considered by the board in June or July of 1964 as to the desired water quality objectives in the ship channel, following completion of the first phase of the survey.

#### PRESENT STATUS OF THE WATER POLLUTION CONTROL PROGRAM IN TEXAS

Probably one of the most outstanding achievements of the past water-pollution-control program has been in the field of municipal waste treatment and disposal. An active partner in this endeavor has been the Texas Water and Sewage Works Association—an association of almost 4,000 members, all of which are intimately connected with the municipal waste treatment field. This association has gained national and even international recognition for its intensive operator training program as well as its never-ending efforts to broaden the scope of technical advances in waste-water treatment knowledge. The association has been influential on the local level in bringing about

needed construction and elevating the status of local operators. As a result, it is with considerable pride that the board reports that every city within the State of Texas having a sewage collection system has some type of sewage treatment facilities with the exception of three small municipalities located along the gulf coast. The 1960 population of these three municipalities was only about 30,000, and each of them is now actively engaged in abatement programs.

Indicative of the high regard Texans have for water is the extensive use of waste water for irrigation purposes. Presently 119 municipalities utilize sewage plant effluents for the irrigation of cotton, cattle feed crops, and pasture land.

Coupled with the developments of these irrigation systems, Texas pioneered in the application of holding ponds (now called sewage oxidation or waste stabilization ponds) as a type of inexpensive but efficient secondary treatment unit. These ponds are being used by 284 municipalities in Texas.

The application of sewage plant effluents for industrial uses was begun in Texas in the late 1930's. At the present time three refineries are using municipal effluent for cooling water, and one of these further uses the

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refinery waste water for flooding operations in the oil production industry.

Texas has 998 municipal waste-water treatment plants, consequently, apprising municipal officials of the status of their facility, the need for planning, financing, and constructing plant enlargements to keep abreast of population growth and the proper maintenance and operation of the treatment works is one of the principal functions of the enforcement agency. Construction grants made available under Public Law 660 have proven of tremendous aid. One hundred and thirty-one projects have been completed and an additional 110 projects are under construction or have been approved. Of the 110 projects just mentioned, 22 are under the accelerated public works program.

There is an active water quality monitoring program underway. This consists of monthly samples being obtained at 276 points located on the rivers and major tributaries of the State. This program has been in effect since 1957 as a cooperative activity between the health department and the parks and wildlife department. Evaluation of data discloses water quality conditions to be generally good with evidence of mineral contamination affecting rather large areas of three river systems, whereas organic contamination is locally confined below major areas of population.

Utilizing the framework of the statewide monitoring program, samples were taken and

the baseline radioactive levels of the surface waters of the State were determined.

Under provisions of article 7621b V.C.S., the Texas Water Commission, in close cooperation with the water pollution control board, administers a permit system for the disposal, by subsurface injection, of municipal and industrial wastes.

Since most of the major industries are concentrated along the gulf coast, the problem of industrial waste disposal is not one as acute as it might be if these industries were located inland. Under the new permit system water quality objectives for tidal water will be established by the board in the near future.

The permit system for oil- and gas-field wastes is in the early stages of establishment with some 70,000 applications for permits having been mailed to operators.

Studies of the control of natural pollution sources are well advanced by the U.S. Public Health Service and the Corps of Engineers.

Status of permits issued by the board to date is as follows: Municipal, 542 statutory issued, 167 being processed, 41 regular issued. Industrial, 1008 statutory issued, 59 being processed, 19 regular issued. Oil and gas, 70,000 applications for permits mailed to operators. Hearings held on permits, et cetera, 41 municipal, 19 industrial, 10 oil and gas.

#### WATER POLLUTION CONTROL NEEDS

Due to the general water-scarce characteristics of Texas and the deep respect of the average citizens toward water, there is no public apathy toward support of the water pollution control program. With the type of approach being taken by the board, and in view of trends observed during the short time of its operation, it seems that the water pollution control program of Texas is receiving full support from all interested groups. On this basis, therefore, the "can-do" spirit is becoming more and more apparent in State-local relationships. Of primary importance at this time is the ability to furnish the know-how leadership for keeping pace with the rapidly increasing economic, industrial, and population growth of Texas. Most of these problems are local in nature and will be resolved through State-local cooperative endeavors. Others, however, are not limited to matters of this nature, and consequently, involve areas of Federal contribution to the program. A few suggestions of such problem areas are as follows:

- 1 Being on the threshold of increased water reuse in Texas, it is becoming more urgent that techniques in the art and science of waste-water treatment be drastically broadened and improved.

- 2 There is a need for the development of reasonably priced, portable, and reliable instruments, recording devices, and data trans-

mission systems for water quality monitoring networks and close surveillance.

3. Better and more quickly determined parameters of water quality are needed.

4. More information is required concerning bioassay tests on salt water fishes, shellfish, and other marine life.

5. Studies are needed on methods and materials to assure the construction of a "tight line" from the house to the treatment plant.

6. Consideration could be given to a program which would encourage plant operators and superintendents to conduct studies and applied research on waste-water treatment process improvements.

In conclusion, the State enforcement agencies, in effect, represent the frontline troops fighting the battle against pollution but are relying upon the logistic support of the Federal Government to develop new and advanced equipment and techniques. If the States receive this kind of support, then certainly they will be in better position to meet and conquer the common enemy, water pollution.

Mr. TOWER. Mr. President, the adoption of my amendment in the nature of a substitute would not hinder water pollution control. Indeed, my amendment merely recognizes that the primary responsibility for pollution control lies with the affected States.

Too often there is a tendency to face up to a problem by creating some sort of new authority that places arbitrary discretion in only one person. That is what I believe has been done in this instance. I do not believe that any one person should possess such power.

I should like to express commendation and appreciation to the distinguished senior Senator from Kentucky [Mr. COOPER] for having the perception to point out to Senators the inherent danger in the enactment of legislation of this kind. He has said that it would give the administrator the authority virtually to zone practically every body of water that feeds into a navigable stream. The significance of such vast power should and must be understood. Furthermore, conceivably at some time such power could be used as a political bludgeon.

So I urge the Senate to give favorable consideration to my amendment in the nature of a substitute. It has already

been acted on by the House committee. It is, in effect, the work of the House committee, which was broadly representative and had considered the various angles. It was a committee that possessed a large Democratic majority at the time the report was made.

I urge the Senate to adopt my amendment because I believe it is a sound and sane solution of what I believe is an inherent and fatal weakness in the bill. At the same time, I do not believe my amendment would narrowly proscribe what we are trying to do in trying to mitigate the pollution of our streams. Certainly something must and should be done in that field, but let us do it in the right way. Let us not run roughshod over the Federal system.

Let us recognize that Governors and State agencies are conscious of the needs, the problems, and the ramifications of the enforcement and other provisions of the act in their own areas and, therefore, should have a decisive voice in the establishment of water quality standards.

Mr. President, I yield 5 minutes to the distinguished senior Senator from Kentucky.

Mr. COOPER. Mr. President, later I shall speak in more detail on this subject in connection with an amendment I shall offer.

In 1963, a bill almost identical to S. 4 was presented to the Senate. I raised in the Senate then, some of the issues which have been discussed by the Senator from Texas [Mr. TOWER]. I pointed out that vast powers were proposed to be given to the Secretary of Health, Education, and Welfare—powers which, in my judgment, would be greater than any powers now given to any other official in the Federal Government. That bill as S. 4, now before us, did not assure to the States, to interstate compacts, to municipalities, the right to participate fully in the development of water quality standards.

It is questionable whether any right of judicial review is provided to the States

by S. 4. The bill confers vast power, one which would enable the Secretary, as stated by the Senator from Texas, to zone every body of interstate water in the United States, and to prescribe the uses of such waters or portions thereof. Nothing like this has ever been proposed before.

In 1963, my efforts were rejected, and the bill went to the House. A different situation obtained there.

During the 1963 hearings in our committee, no Governor was called, some but not many State water authorities were called. But Governors and State water authorities were called in the House. Without exception, the Governors and State authorities who testified before the House committee, protested the ultimate grant of power to one man to fix water quality standards. The House Public Works Committee rejected the Senate bill. In its place, it substituted the measure which is now proposed by the Senator from Texas. I would support S. 4 if there were some provisions in it for the effective participation of the States in the preparation of proper quality standards and for their proper judicial review.

The PRESIDING OFFICER The time of the Senator has expired.

Mr. TOWER. Mr. President, I yield such time to the Senator from Kentucky as he may require.

Mr. COOPER. I support the amendment of the Senator from Texas. If the amendment should be rejected—and I am not suggesting that it will be, although I know the great fighting spirit of the Senator from Maine—I shall offer an amendment that will at the least assure that States, municipalities, and individuals will have the right to have the action of the Secretary reviewed by a court. I support the pending amendment.

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Mr. MUSKIE. Mr. President, I yield myself 5 minutes.

The PRESIDING OFFICER. The Senator from Maine is recognized for 5

minutes.

Mr. MUSKIE. Mr. President, the interesting aspect of the chore that I have had for almost 2 years in dealing with this bill and the arguments against it is that I am often in the position of trying to explain what the bill is and how irrelevant the arguments against the bill are, before I can proceed to deal with the arguments advanced against the bill.

I am interested in the argument of the Senator from Kentucky that the bill gives the Secretary vast powers that are greater than the power given to any official of the Federal Government. This is a form of exaggerated statement that does not stand up. I can illustrate that by referring to the Secretary's power in this very field. It is a power that was considered at the hearings. That is the power of the Secretary to absolutely prohibit from shipment in interstate commerce shellfish which the Public Health Service finds deleterious to health. This is an absolute prohibition which can put a man out of business, as it has done in my State, in the case of the clam diggers and shellfish harvesters along the coast of Maine. There is no recourse whatsoever to the Federal Government for protection against that type of calamity.

The statement of the Senator from Kentucky that the powers asked for on behalf of the Secretary are greater than any powers now existing does not stand up. I am sure that the Senator would agree with me if he were to give the subject further thought.

The proposal presented to us by the Senator from Texas is very interesting. He is saying that the Senate, rather than accept the recommendation of its own committee—a recommendation sponsored by all members of the subcommittee, dealing with the subject, Republicans and Democrats, and reported by the Subcommittee on Water Pollution—should accept the recommendation of a House committee, not of this Congress, but of the previous Congress.

It is a recommendation that the House itself never acted upon. The Senator



from Texas is asking us to accept this proposal, not only against the recommendation of our own committee, but also against the action of the Senate itself in October 1933 when it passed this bill, and particularly this section, in almost exactly the same form by a vote of 69 to 11, with 15 Senators not voting, but expressing their favorable position on it.

We are asked to take the position that this vehicle of the House committee, never acted upon by the House, should be given that weight in the Senate merely because the action of the Senate as a whole was rejected.

I have never found that the Senate was willing to concede its own prerogatives at any time past, and I doubt that it will concede its own prerogatives now.

The substitute offered by the Senator from Texas differs from the Senate bill in one important respect, which I think is at the heart of his proposition. That is with respect to the water quality standard section of the bill.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. MUSKIE. Mr. President, I yield myself such additional time as I may require.

The House bill, for all practical purposes, eliminates any power of the Secretary to establish water quality standards on standards under the provisions of the it the dubious right to make recommendations for standards of water quality.

Under the House bill, the Secretary could not even make recommendations on standards under the provisions of the present law, prior to such time as an enforcement action is begun by a conference. If he should undertake to give consideration to an interstate waterway, in which case he thought a little preventive medicine might avoid a great deal of economic hardship—which is the position now taken by industries and communities—if he should feel that he ought to recommend certain standards of water quality which may apply to preventive measures to the interstate or

State agencies involved, under the House version of the bill, he could not make recommendations to anybody. So in the House bill, he is not even given full and clear authority to recommend standards.

On page 22 of the proposed substitute, there is this interesting language:

No standard of water quality recommended by the Secretary under this subsection shall be enforced under this Act unless such standard shall have been adopted by the Governor of the State Water Pollution Control Agency of each affected State

That language, "each affected State" means not only the State being injured, but the State doing the injury. Is it conceivable that in this type of situation, the Governor of a downstream State which has been injured by its pollution would seemingly accept such a standard if pressures were brought to bear upon him within his own State, by industrial polluters of the waterway, not to accept such standards? It is conceivable that a Governor or a legislature which had found it impossible to generate a public policy or program within its own State to deal with that situation would willingly accept the recommendation of the Secretary of the Department of Health, Education, and Welfare in such circumstances? I doubt it.

It has not happened before. It is because it has not happened before and because these problems have accelerated and accumulated, that it is before the Senate today. It is because it has not been done before that the bill passed the Senate 2 years ago. And it is because it has not happened before that the need has been so clearly recognized by so many people, many of whom I have referred to already in my remarks today.

Mr. President, I shall sum up with one or two observations about S. 4 on the question of water quality standards.

The standards would be pertinent in two different kinds of situations. One situation would be one in which already there is pollution which endangers the health or welfare of any person. I use that language because that language is

found in the present law, which gives the Secretary the right to move into such situations without any standards whatsoever. The proposed standards in that kind of situation would be a warning to people, in advance of enforcement proceedings, that there was a situation requiring corrective action.

The other kind of situation in which water quality standards would be needed is a situation in which there is no pollution at the present time but in which a little preventive medicine is called for, not only in the interest of those who like to use water for recreation, or for drinking, or for water skiing, but in the interest of industry. There have been instances in my State in which we could not allow an industry to settle on the banks of a stream because there was no more oxygen left in the stream. So it would serve the industrial health of that community to have water quality standards established to avoid the expenditure of that oxygen so that the water will be available not only for recreation, but for industry.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. MUSKIE. For those reasons, which could be expanded ad infinitum, I urge the rejection of the amendment of the Senator from Texas.

Mr. TOWER. Mr. President, I yield myself 3 minutes. I should first like to comment on the contention of my friend, the Senator from Maine, that we should accept the work of the Senate committee and reject that of the House committee. I recall reading of an incident which occurred when Mr. Thomas Jefferson returned from France after the Constitution had been framed. He called on George Washington. They were having a cup of coffee. He said to Mr. Washington, "Tell me, Mr. Washington, why do you have a bicameral Congress?" Mr. Washington said to Mr. Jefferson, "Why are you pouring coffee from your cup into your saucer?" Mr. Jefferson said, "To cool it." Mr. Washington said, "That is why we have a bicameral Legis-

lature. We pour legislation from one Chamber to the other to cool it."

The proposed legislation certainly needs cooling. I am not disparaging the work of my friend, the Senator from Maine, whom I hold in high esteem. It is with great trepidation that I take him on, because he is skillful, he has great knowledge, and he has worked zealously to accomplish a very desirable goal.

It appears that the States and State agencies are willing to take their chances in a mutual veto arrangement. Those agencies which opposed the measure, who either appeared or filed statements, include the Delaware Water Pollution Commission, the Texas Water Pollution Control Board, the Alabama Water Improvement Commission, the Tennessee Stream Pollution Control Board, the American Association of Professors of Sanitary Engineering—some of these are not State agencies—the Florida State Board of Health, the Kansas Department of Health, the State of New York Water Resources Commission, the Kentucky State Water Pollution Control Commission, the Kentucky Department of Health, the North Carolina State Stream

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Sanitation Committee, the Pennsylvania State Health Department, the Governor of Maryland, the Arkansas Water Pollution Control Commission, the California Water Pollution Control Association, the Maine Water Improvement Commission—the agency from the Senator's own State testified in opposition to the bill—the Oklahoma State Department of Health, and the Oregon State Board of Health.

I could continue and include agencies from Rhode Island, Utah, Virginia, and many other States.

I should like to read into the RECORD at this time a statement made by the Governor of Texas, Hon. John Connally, at the County Judges and Commissioners Association conference held at Corpus Christi on October 5, 1964, which I think typifies the attitude of responsible

and forward-looking State governments:

One point I want to make clear. Texas is going to determine its own destiny in the development of its water resources. These goals will not be realized by chance nor by blind dependence upon the wisdom of the Federal agencies. We must accept our own responsibilities.

I reject the notion that State governments and State agencies are going to be irresponsible or incompetent.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. TOWER. I yield myself 2 additional minutes.

I reject the notion that State governments and agencies are going to be less competent and fail to recognize that water pollution problems exist; or that they are going to be more loath and reluctant to do something about it.

It is time to stop downgrading State officials and governments. We have in America today some of the best State officials we have ever had, even though most of the Governors are Democratic. I am willing to leave it to them to take care of this problem. This power should be left in the States, rather than in the hands of a single man or administration.

Mr. MUSKIE. The Senator from Texas referred to Maine. The Governor has his own water pollution committee. I do not yield to the Senator, despite the differences in our views, in my appreciation of the very great need of strong local and State government actions. I have served at all levels of State government. I have served in the legislative branch in two levels and the executive branch in two levels.

One of our efforts has been to create every opportunity for the exercise of initiative and for the discharge of responsibility, for the acceptance of the burden involved in the problem, by State and local governments. Over and over again, in the enforcement procedure, in the procedure for setting standards, our State and local governments and interstate agencies have been given an opportunity to come in and do the job.

Just as the Federal Government, in its vast bureaucracy, includes people who are not as wise or as responsible as they ought to be, or who do not always meet the requirements of the public interest as they should, so on the local and State levels is that true. Neither has a monopoly on virtue, ability, or regard for the public interest.

What we have tried to do in this bill—and I think we have succeeded, certainly to the satisfaction of the Republican Members, as well as the Democratic Members, on the subcommittee—is to achieve a cooperative partnership among the State, local, and Federal governments in dealing with a problem that is not only a State and local problem, but a national problem.

The substitute recommended by the Senator from Texas would be a step backward from this objective in that, even with respect to making recommendations, the proposed substitute would dilute the power that the Secretary has under existing law.

Mr. TOWER. Mr. President, I am prepared to yield back the remainder of my time.

Mr. MUSKIE. I yield back my time.

The PRESIDING OFFICER. All time is yielded back.

The question is on agreeing to the amendment of the Senator from Texas.

Mr. TOWER. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. TOWER. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

The question is on agreeing to the amendment of the Senator from Texas [Mr. TOWER].

\* \* \* \* \*

So Mr. TOWER's amendment was rejected.

Mr. MANSFIELD. Mr. President, I move that the Senate reconsider the vote by which the amendment was rejected.

Mr. MUSKIE. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

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Mr. COOPER. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The CHIEF CLERK. Beginning with line 2 page 7, it is proposed to strike out all to and including line 2, page 9, and insert in lieu thereof the following:

(c) (1) In order to carry out the purpose of this act, the Secretary may, after reasonable notice and public hearings and after consultation with the Secretary of the Interior and with other Federal agencies, with State and interstate water pollution control agencies, and with municipalities and industries involved, to obtain the views of such officer and such agencies, municipalities, and industries, prepare proposed regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof

(2) Standards of quality prescribed by regulations adopted under paragraph (1) shall be such as to protect the public health and welfare and carry into effect the purposes of this Act. In establishing such standards with respect to any waters, there shall be taken into consideration (A) the use and value of such waters for public water supplies, agricultural, industrial, and commercial use, the propagation of fish and wildlife resources, recreational purposes, and other uses of significance in the public interest, and (B) the practicability and economic feasibility of attaining such standards.

(3) Such proposed regulations shall be published in the Federal Register, and copies thereof shall be transmitted to all Federal, State, and interstate water pollution control agencies, municipalities, and industrial organizations affected. Upon request made within ninety days after publication of such proposed regulations by one or more of the States, interstate agencies, municipalities, and industrial organizations (referred to hereinafter as "interested parties") affected, the Secretary shall conduct public hearings upon such proposed regulations at a place convenient to the interested parties. In any such hearing, interested parties shall be

accorded adequate opportunity to obtain and present necessary evidence in support of their contentions, and shall be entitled to propose revisions and modifications of the proposed regulations. Upon the basis of all evidence received in any such hearing, the Secretary shall prepare and transmit to each party to the hearing his report thereon, which shall contain a full and complete statement of his findings of fact and his conclusions with respect to issues presented at the hearing. The Secretary may, thereupon, affirm, rescind or modify in whole or in part such proposed regulation.

(4) Except as otherwise specifically provided by this Act, hearings and determinations under this Act shall be made, and subject to administrative and judicial review, in accordance with the provisions of the Administrative Procedure Act.

(5) Regulations under this subsection shall become effective only if, within a reasonable time after being requested by the Secretary to do so, the appropriate States and interstate agencies have not developed standards found by the Secretary to be consistent with paragraph (2) of this subsection and applicable to such interstate waters or portions thereof.

On page 9, line 3, strike out "(5)", and insert in lieu thereof "(6)".

On page 9, line 13, strike out "(6)", and insert in lieu thereof "(7)".

Mr. COOPER. Mr. President, I ask for the yeas and nays on the amendment. The yeas and nays were ordered.

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Mr. COOPER. Mr. President, the amendment which I have offered is much more limited in its scope than the amendment which was offered by the Senator from Texas [Mr. Tower] and which was voted on.

The PRESIDING OFFICER. How much time does the Senator from Kentucky yield to himself?

Mr. COOPER. I yield myself 15 minutes. At the outset I wish to make clear to Senators who are present the essential purpose of my amendment. In the event that the pending bill, S. 4, should become law, my amendment would assure that if the Secretary of Health, Education, and Welfare promulgates water quality standards, then all States, States

joining in compacts, municipalities, and water control agencies who would be affected, would be assured the right of full administrative and judicial review.

The distinguished Senator from Maine [Mr. MUSKIE], the distinguished ranking minority member from Delaware [Mr. Boggs] and the members of his Subcommittee on Water Pollution Control have worked hard to bring the Senate a bill providing for more effective water pollution control policies. I congratulate them. I am interested in their objectives. In 1947 and 1948, when I served on the Committee on Public Works, we approved, and Congress later approved, the first Water Pollution Control Act, an

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act introduced by Senator Taft and Senator Barkley. I was happy to support it. In the years following that, I have supported other amendments to make the act more effective in the interest of water pollution.

Last year, I stated in the debate on the floor, my reasons for opposing the bill reported by the Committee on Public Works, and earlier in this debate I have outlined my reasons for opposing S. 4.

But now I come to the purpose of my amendment. Section 10 of S. 4, which is before the Senate, provides, among other things—and this is essentially the thrust of the bill—that the Secretary of Health, Education, and Welfare shall be authorized to promulgate water quality standards for every interstate body, or navigable water adjacent to one or more States. So at the beginning, let me say that in its geographical scope, it is not a small bill that we are considering; it is a bill which affects every State and countless miles of waters, waters upon which are located great and small cities and many industries, waters whose purity, and whose use for agriculture, industry, water supply, recreation, and the propagation of fish and wildlife, concern us as we look to the future.

The bill is broad not only in its geographical scope; it is broad in the effect

that it could have upon every State, every municipality, and thousands of industries, and farms throughout the Nation. I do not believe I would have to argue to the members of the Committee on Public Works, especially the Senator from Maine [Mr. MUSKIE], that I do not speak in that committee or on the floor of the Senate for any special interest, and I do not do so now. The point I wish to make is that the bill gives to the Secretary of Health, Education, and Welfare tremendous authority and power, a power which I will say again is not matched, in my opinion, by the power of any other official of the Federal Government. I doubt whether the President of the United States has such power, except with respect to foreign affairs. It is a power that would enable the Secretary to promulgate water quality standards. It is an authority that is given him to take measures to abate any nuisance, which is defined in the bill as any discharge into the water which would reduce the water quality standards he has established.

The bill gives him the power to zone interstate waters, and navigable waters adjacent to States, reaching our lakes and the ocean itself. I do not say it will be used; nevertheless, it is a power which would enable the Secretary to determine what portion of a stream should be set aside for industry, what portion should be used for agricultural purposes, what portion for recreation, and what portion for the development of fish and wildlife, and for such other uses as he may determine.

This is a new legislative concept. If there were proper precautions drawn about the proposal, which would give States, municipalities, and others concerned an adequate role in the development of the standards which affect them and, finally, the right of judicial review, I would not oppose this concept. It does look ahead to a better, purer water supply for the Nation, a more beautiful country, and the general public interest as the Senator from Maine has said.

The Senator from Maine will argue, as he has—and very effectively, at least to the Senate—that all of these rights are preserved in the bill. I disagree with him. I have not been able to convince him. I was not able to convince the Committee on Public Works or the Senate last year. Nevertheless, I hold to my views, derived from my study of the bill.

Before the Secretary can promulgate standards, he must consult with the States, municipalities, and others concerned, and must hold public hearings. But that does not affect his sole and ultimate authority to promulgate and make effective water quality standards.

It is true also that after he promulgates the regulations, public hearings can be held upon the request of a Governor. The Secretary would have the authority to revise or modify original standards that had been promulgated. That is a fair procedure, but it does not affect his essential authority to promulgate the standards.

The Senator from Maine will argue against my insistence that there be written into the bill provisions guaranteeing to the parties affected the right to resort to the courts. He will say, in my judgment, as he said in committee, that this right is assured under its enforcement procedures. I make the point that the enforcement sections apply to the abatement of a nuisance and provide procedures to be followed after a nuisance occurs.

My amendment insists that after the standards are promulgated and before the nuisance occurs that States, municipalities, and individuals actually affected by the standards, and showing cause to courts, would have the right to be heard.

I shall discuss the specifics of my amendment, then I shall be finished.

The first section, section (c) (1) is essentially the same as provided by S. 4.

Subsection (2), of my amendment, prescribing the criteria under which the Secretary would act in proposing and

promulgating water quality standards, is essentially the same as contained in S. 4 with one distinction.

I propose criteria in addition to the criteria of S. 4. I refer to the practicality and economic feasibility of attaining such standards. This is practical and necessary and fair.

The criteria of S. 4 includes the value of such waters for public water supplies, industrial use, propagation of fish, wildlife resources, and recreational resources.

I have added another factor: "the practical and economic feasibility of attaining such standards" which is a necessary factor, in all commonsense.

Subsection 3 of my amendment is very much like the language in S. 4, which authorizes a public hearing after the regulations are proposed by the Secretary. My amendment is somewhat more specific.

My amendment would require that regulations be published in the Federal Register, copies be transmitted to the States and other agencies which would be affected, and then all parties affected would be given 90 days in which to prepare for public hearing, and then the right to present their views if they believe revision is indicated.

This is an important distinction between my amendment and S. 4. Hearings under S. 4 are limited to the request of Governors. My amendment opens hearings to all parties affected. This is elemental justice.

Mr. LAUSCHE. Mr. President, will the Senator yield for a question?

Mr. COOPER. I shall yield in a few moments. S. 4 would permit only the Governor of a State to ask for a public hearing, to ask for modifications and revision. My amendment would not limit this power to the State, but would extend it also to municipalities that might be affected, great cities such as Cincinnati and Cleveland.

I think of those cities because I see the Senator from Ohio [Mr. LAUSCHE] in the Chamber. I am not trying to persuade

him to vote for this amendment on that account. But, municipalities all over the country would be concerned.

Mr. MUSKIE. Mr. President, will the Senator yield?

Mr. COOPER. I shall yield later. I would like to finish first. I have never had the chance to present my position in whole to the Senate.

I learned a great deal from the Senator from Maine. My amendment contains the same provision as S. 4, which is that the Secretary could not put into effect his standards until the States have had an opportunity to promulgate their own water quality standards. Again, I know that the Senator will argue, "We are giving the States a chance."

I say that it is a fictitious chance because the standards that they would be required to establish must be identical with the standards that the Secretary would promulgate or consistent with them.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. COOPER. Mr. President, I yield myself 5 additional minutes.

The PRESIDING OFFICER. The Senator from Kentucky is recognized for an additional 5 minutes.

Mr. COOPER. Mr. President, no matter what is said, in essence, the ultimate and complete power is given to one man to fix water quality standards for every interstate stream in the country, including zoning, if he so determined. I shall read the last provision of my amendment and I do not see how anyone could be opposed to it. It reads:

Except as otherwise specifically provided by this Act, hearings and determinations under this Act shall be made, and subject to administrative and judicial review, in accordance with the provisions of the Administrative Procedure Act

The Administrative Procedure Act provides for adequate administrative review. It provides also that after a final rule is made, an affected party may ob-

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tain a review in the circuit court of appeals. The review would not go into the question de novo, but would go to the abuse of discretion by the official or agency entering the order.

Mr. President, I ask unanimous consent that section 1009, title 5, of the Administrative Procedure Act, subsection 19, United States Code, 1958 edition, be printed at this point in the RECORD.

There being no objection, the section was ordered to be printed in the RECORD, as follows:

#### §1009 Judicial review of agency action

Except so far as (1) statutes preclude judicial review or (2) agency action by law committed to agency discretion—

(a) *Right of review* Any person suffering legal wrong because of any agency action, or adversely affected or aggrieved by such action within the meaning of any relevant statute, shall be entitled to judicial review thereof.

(b) *Form and venue of proceedings* The form of proceedings for judicial review shall be any special statutory review proceeding relevant to the subject matter in any court specified by statute or, in the absence or inadequacy thereof, any applicable form of legal action (including actions for declaratory judgments or writs of prohibitory or mandatory injunction or habeas corpus) in any court of competent jurisdiction. Agency action shall be subject to judicial review in civil or criminal proceedings for judicial enforcement except to the extent that prior, adequate, and exclusive opportunity for such review is provided by law.

(c) *Acts reviewable* Every agency action made reviewable by statute and every final agency action for which there is no other adequate remedy in any court shall be subject to judicial review. Any preliminary, procedural, or intermediate agency action or ruling, not directly reviewable shall be subject to review upon the review of the final agency action. Except as otherwise expressly required by statute, agency action otherwise final shall be final for the purposes of this subsection whether or not there has been presented or determined any application for a declaratory order, for any form of reconsideration, or (unless the agency otherwise requires by rule and provides that the action meanwhile shall be inoperative) for an appeal to superior agency authority.

(d) *Relief pending review* Pending judicial review any agency is authorized where it finds that justice so requires, to postpone the effective date of any action taken by it. Upon such conditions as may be required

and to the extent necessary to prevent irreparable injury, every reviewing court (including every court to which a case may be taken in appeal from or upon application for certiorari or other writ to a reviewing court) is authorized to issue all necessary and appropriate process to postpone the effective date of any agency action or to preserve status or rights pending conclusion of the review proceedings

(e) Scope of review So far as necessary to decision and where presented the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of any agency action. It shall (A) compel agency action unlawfully withheld or unreasonably delayed, and (B) hold unlawful and set aside agency action, findings, and conclusions found to be (1) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (2) contrary to constitutional right, power, privilege, or immunity; (3) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; (4) without observance of procedure required by law, (5) unsupported by substantial evidence in any case subject to the requirements of sections 1006 and 1007 of this title or otherwise reviewed on the record of an agency hearing provided by statute, or (6) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court. In making the foregoing determinations the court shall review the whole record or such portions thereof as may be cited by any party, and due account shall be taken of the rule of prejudicial error. (June 11, 1946, ch 324, §10, 60 Stat. 243.)

#### EFFECTIVE DAYS

Section as effective three months after June 11, 1946, see section 1011 of this title

#### CROSS REFERENCES

Section applicable to functions exercised under International Wheat Agreement Act of 1949, see section 1642 (1) of title 7, Agriculture.

Section applicable to judicial review of any agency action under the Atomic Energy Act of 1964, see section 2231 of title 42, the Public Health and Welfare.

Mr. COOPER. Mr. President, I shall not misquote the Senator from Maine. The Senator made the statement in committee that my amendment would open the doors to everyone, whether or not they had an interest. Section 1009, subsection (a) of the Administrative Procedure Act defines those persons affected and the reasons for giving

parties the right to go to the courts. So, I would say that there is no strength to that argument.

Last year, the committee held hearings for 6 days. No Governor testified before the committee. Few State water control commissioners were represented before the committee. It went to the Committee on Public Works of the House after the bill passed the Senate. The committee considered the bill. It heard the testimony of about 25 Governors and State water pollution control boards. All raised the questions that I have raised here today. The committee refused to accept S. 4, with respect to the authority to be given the Secretary.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. COOPER. Mr. President, I close by saying that if the protections I seek can be included in the present bill respecting the formulation of standards and the assurance of judicial review, I would support the concept of water quality standards. But I could not vote for the bill, in the form it has been presented to the Senate, without these proper safeguards.

Mr. LAUSCHE. Mr. President, how much time remains?

The PRESIDING OFFICER. There is an additional 10 minutes remaining.

Mr. LAUSCHE. Mr. President, in reading the amendment, I note that prior to the promulgation of the rule, hearings are to be conducted. The Secretary then has the right to promulgate a rule. May I ask whether the amendment would afford the affected parties a right to be heard after the rule is recommended, and before adoption?

Mr. COOPER. Yes. I must say that we are in accord on that.

Mr. MUSKIE. S. 4 does that also.

Mr. COOPER. Mr. President, after the regulation has been published—and my amendment would require publication and notice—then a public hearing could be requested.

The distinction between the amendment offered by the Senator from Maine



and my amendment is that the amendment of the Senator from Maine would allow only the Governor of a State to request a public hearing, unless the Secretary wanted to do it on his own motion.

My amendment would permit any affected public party to ask for a public hearing. This in accord with principles of justice.

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. MUSKIE. Mr. President, touching the last point first—

The PRESIDING OFFICER (Mr. MONDALE in the chair). How much time does the Senator yield himself?

Mr. MUSKIE. Fifteen minutes.

Touching the last point first, so that my reply may be close to the statement made by the Senator from Kentucky, let me say that the procedures set up in the rulemaking and policymaking authority given in S. 4 are subject to the Administrative Procedure Act. The Senator has said that S. 4 gives only the Governor the right to appeal from any water quality standard established by the Secretary. That is not so. S. 4 provides, following the promulgation of the standard, that the Governor may then petition, in accordance with the procedure followed in establishing the standard in the first instance, for a revision of the standard; but in addition to the provision in S. 4 is this provision of the Administrative Procedure Act. We have gone over this in the committee, and the matter is plain and clear:

Every agency shall accord any interested person—

Any interested person—

the right to petition for the issuance, amendment, or repeal of a rule.

So the provision of S. 4 must be read in connection with the requirements of the Administrative Procedure Act.

If there is any doubt in the Senator's mind or that of any other Senator that the Administrative Procedure Act is applicable, I shall be happy to accept an amendment to this effect: All action

taken under this section for the adoption of standards and the promulgation of rules and regulations shall be taken in conformance with the provisions of the Administrative Procedure Act.

There is no question in my mind, or that of any other lawyer who has addressed himself to this question, that the Administrative Procedure Act will be applicable to this bill if it is passed. But if there is any doubt, I shall be happy to accept the amendment.

Mr. AIKEN. Mr. President, will the Senator yield?

Mr. MUSKIE. I yield to the Senator from Vermont.

Mr. AIKEN. I was about to ask the Senator from Maine, if that safeguard is already provided for in the Administrative Procedure Act, what his objection was to accepting the amendment offered by the Senator from Kentucky. It seems to me it would be better to have a duplication of this authority than to take a

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chance on some definition which might be placed on the various sections of the law later. I wondered what his objection was. I am sorry I have not been on the floor long enough to have heard all the argument.

Mr. MUSKIE. First of all, the provision of S. 4 with which we are dealing is the product of 2 years' work, careful refining and polishing, so that members of the committee on both sides know what it means and what its implications are. There is no doubt in our minds about it.

The amendment of the Senator from Kentucky has been presented to me in its present form for the first time in the past 30 minutes. From such examination as I have been able to give it in that time it does not seem to me that it changes sufficiently to make different, in my judgment, the provisions or objectives of S. 4. It says the same thing, in language that has not had the kind of testing and refining that the language in the bill has.

For example, the Senator's amendment

provides that the regulations shall be published in the Federal Register. That is a requirement of the Administrative Procedure Act.

Mr. AIKEN. My question is: Does the amendment offered by the Senator from Kentucky do violence to S. 4, the bill itself?

Mr. MUSKIE. I cannot be sure. The Senator from Kentucky obviously feels it does, or he would not have offered it. He is not in the habit of offering frivolous amendments. And because of that conviction, I must be careful when I say that in my judgment it does not differ from S. 4.

Mr. AIKEN. The reason I ask the question is that I know the Senator from Kentucky is not in the habit of offering amendments that do violence to a worthy bill. I wondered what the objection was. Perhaps the Senator from Kentucky can explain what his amendment would do which the Senator from Maine has not been able to discern up to now.

I have a great deal of respect for both the Senator from Maine and the Senator from Kentucky. I dislike to vote against either of them. Therefore, I must get down to the merits in making up my mind.

Mr. MUSKIE. I agree.

In the first place, the Senator's amendment is presented in the context of the argument which he has made, and the argument which he has made includes what he considers to be a list of dangers in S. 4. He leaves the implication that his amendment will deal with this matter. Otherwise, the argument has no relevance.

For example, he has said that this amendment is designed to protect the right to judicial review which, somehow, S. 4 has presumably jeopardized.

S. 4 does not jeopardize the right to judicial review. But if it does, the Senator's amendment does nothing different from S. 4 to correct that weakness.

Secondly, the Senator from Kentucky expresses concern about the vast geographical scope that S. 4 would give to

the Secretary's control over the waters of the Nation.

Here, again, if that is a danger in S. 4, the Senator's amendment does nothing to correct it. Moreover, the bill does not enlarge by a cubic inch of water the jurisdiction of the Secretary under present law. So the jurisdictional territory does not change under S. 4. But if it did, the Senator's amendment does not correct that point.

Third, the Senator complains that S. 4 is too broad in its effect over States, municipalities, and industries. If indeed, S. 4 does go beyond reasonable bounds in this respect, again the Senator's amendment does not touch the point in any different way than does S. 4.

The Senator from Kentucky speaks of the vast authority and power S. 4 gives to the Secretary.

I have indicated that S. 4 provides ample protections. But if it does not, the Senator's amendment does not change the bill, if it is adopted, in its effect in that respect.

The fifth point the Senator makes is that S. 4 gives the Secretary power to zone all our waters. I do not believe that is true. But if it is true, it is true as a result of the powers the Secretary now has.

For example, under section 2 of the present law is this language, and the title of the section: "Comprehensive Programs for Water Pollution Control":

The Secretary shall, after careful investigation, and in cooperation with other Federal agencies, with State water pollution control agencies and interstate agencies, and with the municipalities and industries involved, prepare or develop comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters.

This is a power the Secretary now has. S. 4 does not enlarge it in any way. But under S. 4 it is required that the Secretary, in advance of any attempt on his part to use enforcement powers which the law gives him, to establish standards so that industrial and other users

and interstate agencies may understand in advance what is expected of them. He cannot exercise even this much authority without the safeguards which have been outlined in that section, which I shall be happy to discuss in detail.

Mr. AIKEN. Mr. President, will the Senator yield further?

Mr. MUSKIE. I yield.

Mr. AIKEN. If the Senator's only objection to the amendment offered by the Senator from Kentucky is one of doubt in that the meaning may not be clear, would he not be willing to take the amendment to conference? I am sure all of us believe the question will be cleared up there. I expect to vote for the measure, as I did previously.

It seems to me it is better to state a certain position of authority twice than it is to run the risk of leaving it out, if it is a desirable matter.

Mr. MUSKIE. If there were a way to bring the Senator's language into the bill, in addition to the committee's language, I would have no particular objection to the surplusage, but he offers it as a substitute. Therefore, the Senator from Vermont puts us in the position of saying that, as between two versions which say essentially the same thing, we are to take something developed in the past 6 hours rather than something which has been developed over the last 2 years.

Mr. AIKEN. I am not saying, I am asking. I am not saying.

Mr. LAUSCHE. Mr. President, will the Senator from Maine yield?

Mr. MUSKIE. I yield.

Mr. LAUSCHE. Is there any specific language in S. 4 giving the right to an aggrieved party to avail himself of the Administrative Procedure Act and to appeal to the courts, in the event he believes that his rights have been violated by the finding made? Is there any specific language in S. 4 to that effect?

Mr. MUSKIE. In the first place, S. 4 does not deal with the enforcement authority of the Secretary, that is, with the procedure for using that enforce-

ment authority. It deals only with the question of establishing standards of water quality in advance of any enforcement situation.

If the enforcement powers are invoked, they are spelled out in present law and are not changed by S. 4, except to insert the test of practicability on standards. Otherwise, the enforcement powers are not changed. If they are invoked, there is ample protection for the individual.

First of all, the Secretary must call a conference. At that conference, all interested States, interstate agencies, industries, and municipalities are parties. A case is made for the factual basis, for the consideration of the Secretary. The conference then reports to the Secretary with recommendations, if it chooses.

In a report to State and interstate agencies, the Secretary then provides for a minimum of 6 months to act in accordance with the conference report. If they fail to act, the Secretary can then convene a hearing board.

Each of the States involved can appoint a member of the hearing board. The Federal Government is also represented. The hearing board then hears all the interested parties. At the conclusion of its deliberations, it files a report with the Secretary indicating what, if anything, the hearing board concludes as to the state of pollution; what, if anything, it concludes about steps to be taken to alleviate the situation; and also what, if anything, it recommends for additional action.

The Secretary then sends those recommendations to the States and the interstate agencies and gives them no less than 6 months to do something about it. If they fail to act, he then asks the Attorney General to invoke the judicial process.

Mr. LAUSCHE. The Senator from Kentucky suggests that we write into the bill the applicability of the Administrative Procedure Act and the right to appeal. Is there any specific language in S. 4 stating that the Administrative

Procedures Act applies, and that a party who believes himself to be wronged may go to court?

Mr. MUSKIE. No.

The PRESIDING OFFICER. The time of the Senator has expired.

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Mr. MUSKIE. Mr. President, I ask unanimous consent to proceed for 5 additional minutes.

The PRESIDING OFFICER. The Senator from Maine is recognized for 5 additional minutes.

Mr. LAUSCHE. If it is not, what is wrong with putting it into the bill and resolving the question positively, so that it does apply and the right to go to court exists?

Mr. MUSKIE. I would be happy to accept the language of the suggestion and insert the following language:

All action taken under this action for the adoption of standards in the promulgation of rules and regulations shall be taken in conformity with provisions of the Administrative Procedure Act.

I have no objection to such a provision. I believe it is unnecessary, but I would be happy to accept that language.

Mr. President, I offer that amendment at this time.

The PRESIDING OFFICER. The Chair advises the Senator that before doing so it will be necessary to obtain unanimous consent.

Mr. COOPER. Mr. President, what is the parliamentary situation?

Mr. MUSKIE. Mr. President, I am sorry—I withdraw my suggestion.

The PRESIDING OFFICER. The Senator's request is withdrawn.

Mr. LAUSCHE. One further question. The Senator from Kentucky has stated that in his amendment there is certain following language which is not in S. 4—namely, that in determining the quality standards and what shall be done to procure them, there shall be considered the practicability and economic feasibility of obtaining such standards.

Will the Senator discuss what his pro-

posal provides on that item, and what his position is on it? On page 10 there is some language relating to the practicability of complying with such standards as may be applicable. Is that in here?

Mr. MUSKIE. Yes.

The language about which the Senator from Ohio inquires is found in two places; first, in the provision which to do with the standard that the court shall use in evaluating not only the standard, but also the practicability of the abatement orders which it is considering.

Thus, the court is given that authority under S. 4.

Second, in addition to the language which the Senator has just brought to my attention at the top of page 10, it gives the hearing board—to which I referred earlier in my colloquy with the Senator—the same mandate to consider the practicability of applying such standards as may be applicable.

Obviously the mandate to the court and the mandate to the hearing board which establishes the size of the opening at one end of the pipe would control what goes on at the other end of the pipe.

The Secretary must consider, as he frames these standards, that they will be subject to the test of practicability, first by the hearing board and second by the court, so the test is clearly set out. There is no question about it.

Mr. COOPER. Mr. President, will the Senator from Maine yield to me—

Mr. MUSKIE. I am glad to yield to the Senator from Kentucky.

Mr. COOPER. If the Senator from Maine will allow me to proceed, I wish to answer the arguments the Senator has made respecting my statement supporting my amendment.

Mr. MUSKIE. I thought the Senator rose to answer a question.

Mr. COOPER. The Senator from Maine stated a few minutes ago that he was about to respond to the propositions I had made in my statement. I desire to answer his argument.

Mr. MUSKIE. I am happy to yield

to the Senator from Kentucky on his own time.

Mr. COOPER. Yes, Mr. President, I yield myself 3 minutes.

The PRESIDING OFFICER. The Senator from Kentucky is recognized for 3 minutes.

Mr. COOPER. The statement was made that my amendment is a new one, and had not been made until a few minutes ago. It is correct that I reduced in form the amendment I offered in the committee, which spelled out in detail the right of affected parties for review in the circuit court of appeals of any regulation the Secretary might promulgate.

In place of such specific detail I have put this language in my pending amendment:

Except as otherwise specifically provided by this act, hearings and determinations under this act shall be made, and subject to administrative and judicial review, in accordance with the provisions of the Administrative Procedure Act.

This in substance, is exactly what I have been arguing for in committee for 2 years. I have offered the substance of this language—the right of judicial review in hearings and the last time, only yesterday. The distinguished Senator from Maine would not accept it. He would not agree to it. The committee would not agree to it and voted it down.

The second response I make is this: The Senator has referred to the additional criteria which my amendment purposes “the practicability and economic feasibility of attaining such standards.” The Senator has stated that this language is contained in S. 4 with respect to abatement proceedings. That is an entirely different matter. It is correct that when proposals for abatement are considered and recommendations are made by the hearing board, the question of the practicability and economic feasibility of abatement plans may be considered.

Mr. MUSKIE. Mr. President, will the Senator yield on my time?

Mr. COOPER. I shall yield in a moment. But the criteria I offer goes to the development of the water quality standards. That is entirely separate from their application in our statement proceedings.

Third My amendment relating to public hearings is not limited to a Governor making a request, but gives the right to any affected party, anyone affected within the terms of the Administrative Procedure Act.

The Senator from Maine argues that the Administrative Procedure Act applies, even without its specific mention in the bill. Even if it is correct that it does apply, without a specific provision in the act saying it is applicable, yet if there is language in the act which contradicts the language of the Administrative Procedure Act, as S. 4 does, of course the language of the bill would supersede the Administrative Procedure Act.

I shall not detain the Senate longer. I have stated my position. I was rather interested to hear the distinguished Senator from Maine say, after 2 years of work on this subject, that the bill does not give any additional authority to the Secretary of Health, Education, and Welfare. I ask, then, what is the purpose of the bill?

I have great respect for the Senator. He is an able debater. That is the great problem I have with him in committee, and on the floor. When we reach a specific point for debate and answer, he raises some other point. This makes matters difficult.

Mr. SALTONSTALL. Mr. President, will the Senator yield?

Mr. COOPER. I yield.

Mr. SALTONSTALL. Is not the Senator from Kentucky trying to make sure that in this vast new power which is being given to the Secretary of Health, Education, and Welfare, the Governor of a State and the States themselves will be assured of an opportunity of a public hearing in court, if necessary?

Mr. COOPER. The right would be

given to any affected party.

Mr. President, my amendment does not meet all the objections in the bill. I am offering it as a minimum assurance that the parties will have their day in court.

Mr. MUSKIE. Mr. President, I yield myself 2 minutes. I believe I should make this point so that the Record will be very clear. I shall not go beyond it, unless I am asked some questions. The amendment of the Senator from Kentucky would change S. 4 in one further important respect, and that is in the procedure which is established in S. 4 for a revision of standard once they have been promulgated.

The Senator from Kentucky would rely wholly upon the provisions of the Administrative Procedure Act for that purpose. The committee felt it important 2 years ago that there be clearly spelled out in the bill an opportunity to test the standards that had been promulgated by the Secretary, and that that test be applied by all the agencies which the Senator is interested in protecting, and the interests that he is interested in protecting.

The provisions set out in S. 4 do this very thing. The day after the Secretary promulgates his standards, the Governor of any State can question them, not only under the Administrative Procedure Act, which is open to any interested party, but also in his own right under the provisions of S. 4, and test them in any way he wishes to test them, and to suggest modifications or outright repeal.

There is one other point that should be made. What we are talking about is the establishment of standards, not as a

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preliminary action, but as an enforced action. There is a very important distinction. When we are talking about enforcement action, we are talking about something that impinges on someone or has a direct impact.

When we are talking about standards, I have in mind, for example, the possi-

bility of the standards of a pure stream not being defiled by any industrial user.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. MUSKIE. I yield myself 2 additional minutes.

The PRESIDING OFFICER. The Senator may proceed.

Mr. MUSKIE. From what basis of fact could a determination be made as to whether the standard required in that kind of situation is practicable or economic or feasible as to some future use, which has not been identified or defined?

When we are talking about established standards, where there is no indicated need for enforcement, we are talking about a situation which would call for the wisdom of Solomon to apply the practicability standard at that point.

Therefore, understandably, the practicability standard is established and clearly established in the law by S. 4 in the enforcement section of the law, where it ought to be, in the place where the people's right are being affected by the proposed abatement order of the Secretary.

Mr. HOLLAND. Mr. President, will the Senator yield for a few questions?

Mr. MUSKIE. I am happy to yield to the Senator from Florida.

Mr. HOLLAND. Is it correct to say that the fact that a stream is navigable brings it under the proposed act, even though it is an intrastate stream and not an interstate stream?

Mr. MUSKIE. In my judgment, the stream must cross a State boundary to be covered by the provisions of the bill; that is, by the standards section. Under current law, the Secretary is given authority to move into intrastate streams when requested to do so by the Governor of a State.

However, the bill (S. 4) provides no authority for the Secretary to establish standards on any intrastate stream when he is invited in by the Governor. The standards section is clearly limited to interstate streams.

Mr. HOLLAND. Then, on the request

of the Governor of a State, having a large intrastate stream which passes various industries and various cities, the Secretary would have no authority whatever under the proposed act to set standards of purity? Is that correct?

Mr. MUSKIE. None whatever under these provisions. He has general authority under the present law to suggest programs. He could use that authority in making recommendations to the Governor of the State.

The PRESIDING OFFICER. The time of the Senator has again expired.

Mr. MUSKIE. I yield myself 2 additional minutes.

But the Secretary cannot go in in advance on an intrastate stream.

Mr. HOLLAND. In my State, the St. Johns River runs north for approximately 200 miles, to the city of Jacksonville, and then turns east and flows into the Atlantic Ocean. It is a large stream, and navigable for at least 150 miles of its length. The stream passes various cities, such as Sanford, Palatka, Green Cove Springs, and Jacksonville, to name only a few. The stream is now receiving, and probably will in the future continue to receive, the effluence from a mill at a certain point lying between certain of these cities. Assuming that the Governor of the State should ask the Secretary to come in and set standards as to this stream, would the Secretary have the authority to set standards for that stream?

Mr. MUSKIE. Not under this section.

Mr. HOLLAND. Under any section?

Mr. MUSKIE. I should like to read to the Senator the language in the present law bearing upon the Secretary's authority.

Under section 2 of the present law, under the title "Comprehensive Programs for Water Pollution Control," the present act provides:

Sec. 2. (a) The Secretary shall, after careful investigation, and in cooperation with other Federal agencies, with State water pollution control agencies and interstate agencies, and with the municipalities and

industries involved, prepare or develop comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters.

That would give him the authority, as I understand, to recommend programs which might include standards of use. But that is not the kind of authority which would permit him to go on from there and actually promulgate standards that would have the force of law on anyone in that State.

Mr. HOLLAND. There is no provision in the bill that would give the Secretary the right in such a case to prescribe compulsory standards of purity of water in such a stream?

Mr. MUSKIE. I would think not. I have one caveat on that point. Is there any tributary of the stream to which the Senator has referred which crosses the State border?

Mr. HOLLAND. No. The border between the State of Florida and the State of Georgia is itself another river, the St. Marys River, so that streams that would come from the north would begin inside the State of Florida.

Mr. MUSKIE. Then it is my impression that in that situation the only authority the Secretary would have with respect to standards would be the recommending authority in the language of the present law, which I have just read. S 4 would not expand the authority.

Mr. HOLLAND. If the Governor made a request of the Secretary of the Interior in such a matter, how far could that request go and how far could the Secretary go in fulfilling it?

Mr. MUSKIE. That would be under present law. Under present law the Secretary has instituted enforcement actions of a type which can be brought only when there is an endangerment to health and welfare in, I believe, roughly 30 to 35 instances. I believe that a few of those may have involved intrastate waters and have been brought at the request of the Governor. I think there has been only a handful of those. Other than those, I believe most of the actions

taken by the Secretary have involved interstate streams.

With respect to comprehensive programs—the language to which I referred earlier—the Secretary is undertaking river basin studies of the major river basins of the country with a view to development, with the assistance of interstate and intrastate agencies, of programs for the cleanup of the waters. But they are subject, of course, to the cooperative efforts of the States.

Mr. HOLLAND. With reference to the substitute amendment which the Senator has offered, if standards could be imposed by the Secretary in such a case as I have recited, would it clearly give the right to the mayors of the various cities, to the industries that were involved, and to property owners who were involved, to take the contrary positions, and would it give them the right in court to take those positions?

Mr. MUSKIE. As I understand, the Administrative Procedure Act provides only for administrative review of the regulations. Judicial review is provided when enforcement action is undertaken but in the establishment of rules and regulations only administrative review is provided. I am not an authority on the Administrative Procedure Act—except insofar as the sections are relevant.

Mr. HOLLAND. In any event, under the Administrative Procedure Act, if the Secretary should attempt to set standards in such a case as I have recited, could the mayors of the various cities having contradictory rights, and property owners and industries having contrasting rights, take an opposite position and be heard under the Administrative Procedure Act?

Mr. MUSKIE. As I understand that section, they could.

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So Mr. COOPER's amendment was rejected.

Mr. MUSKIE. Mr. President, I move to reconsider the motion by which the

amendment was rejected.

Mr. MORSE. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. DIRKSEN. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. DIRKSEN. Have the yeas and nays been ordered on passage of the bill?

The PRESIDING OFFICER. The yeas and nays have not been ordered on passage of the bill.

Mr. DIRKSEN. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. MUSKIE. Mr. President, as I indicated in the discussion on the Cooper amendment, I offer an amendment. All this amendment would do would be to make all of the authority exercised by the Secretary under S. 4 subject to the Administration Procedure Act. I personally think that it would be subject to it anyway, but to clarify the matter, I offer the amendment.

The PRESIDING OFFICER. The clerk will state the amendment.

The LEGISLATIVE CLERK. Between lines 17 and 18 on page 9 it is proposed to insert:

(7) All action taken under this section for the adoption of standards and the promulgation of rules and regulations shall be taken in conformity with provisions of the Administrative Procedure Act

Mr. MUSKIE. Mr. President, I ask for the yeas and nays on the amendment.

The yeas and nays were ordered.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Maine. The yeas and nays have been ordered, and the clerk will call the roll.

The legislative clerk called the roll.

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So, Mr. MUSKIE's amendment was agreed to.

Mr. LONG of Louisiana. Mr. Presi-



dent, I call up my amendment, which is at the desk.

The PRESIDING OFFICER. The amendment offered by the Senator from Louisiana will be stated.

The LEGISLATIVE CLERK. It is proposed, on page 5, between lines 10 and 11, to insert the following:

No part of any appropriated funds may be expended pursuant to authorization given by this Act involving any scientific or technological research or development activity unless such expenditure is conditioned upon provisions effective to insure that all information, copyrights, uses, processes, patents, and other developments resulting from that activity will be made freely available to the general public. Nothing contained in this paragraph shall deprive the owner of any background patent relating to any such activity, without his consent, of any right which that owner may have under that patent.

Whenever any information, copyright, use, process, patent, or development resulting from any such research or development activity conducted in whole or in part with appropriated funds expended under authorization of this Act is withheld or disposed of by any person, organization, or agency in contravention of the provisions of the preceding paragraph, the Attorney General shall institute, upon his own motion or upon request made by any person having knowledge of pertinent facts, an action for the enforcement of the provisions of the preceding paragraph in the district court of the United States for any judicial district in which any defendant resides, is found, or has a place of business. Such court shall have jurisdiction to hear and determine such action, and to enter therein such orders and decrees as it shall determine to be required to carry into effect fully the provisions of the preceding paragraph. Process of the district court for any judicial district in any action instituted under this paragraph may be served in any other judicial district of the United States by the United States Marshal thereof. Whenever it appears to the court in which any such action is pending that other parties should be brought before the court in such action, the court may cause such other parties to be summoned from any judicial district of the United States.

Mr. LONG of Louisiana. Mr. President, S. 4 authorizes the expenditure of public funds for research and development to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes.

The research to be financed by these funds is intended to benefit the public to the greatest possible extent. It is natural, therefore, that the results of the research should be available to those whom the research is intended to benefit in the first place: The United States, the individual States, the general public, and the populations of many areas where water pollution problems are now serious or are expected to be serious in the future. The proposed amendment is an assurance and mandate that the intent and purpose of this legislation will be carried out.

This amendment is similar to the provision unanimously approved by the Senate for the Coal Research and Development Act, the Helium Gas Act, the saline water bill, the disarmament bill, the mass transit bill, and the water resources bill. And additional provision has been added, however, to assure that the Government in any action for the vindication of its rights will not be denied adequate relief because of procedural obstacles.

What we are talking about is that when the Government makes \$20 million available in grants to States and municipalities for them to do research, those people are not going to give away private patent rights with the Government's money, with the result that the private contractor would then be in a position to deny every other municipality in America, including the one that signed the contract, the benefit of the Government's \$20 million in research money.

What has been happening to this research money is so bad that the men who signed the contract should be in jail.

I have before me a publication of the General Accounting Office showing, on page 6, that the Department of Defense awarded a contract to one of the biggest corporations in America, receiving many millions of dollars of Federal money, and taking out private patents which put them in a position to deny

everyone the benefit of the Government's own research money. The Government is supposed to be licensed so that it can license someone to work in behalf of research for the Government, or on national defense.

Although these people are supposed to be permitted private patents to their own advantage, they seek a patent monopoly and they do not even tell the Government what they are developing.

At the time of the review, for example, we found that LMSC—which is the Lockheed Co.—had refused to discuss information on 58 subjects of interest to the Government. That was done under a contract which requires disclosure. Lockheed would not disclose information to the Government on 340 other subject inventions which had been delayed from 6 to 46 months—as long as 4 years after the inventions were reported to the contractor, or by the employee inventors.

Imagine that. We give those people \$12 billion for research. What do they do? They will not even tell the Government what it will get for the \$12 billion.

Suppose they are trying to build a missile to shoot down an attack vessel. We would need to know what those people have discovered with our own money. We cannot find out. They will not tell the Government.

Director Webb is signing the contracts—in my judgment, in violation of the law. If they have the power to get away with this, such administrators violate the law in this giveaway.

We must put it expressly into law that this research will be for the benefit of 180 million Americans, when it is made with Government money. Otherwise, we shall not be able to protect the Government's money.

I am happy to say that the distinguished Senator from New Mexico [Mr. ANDERSON] put amendments into the saline water research bill to see to it that the Government's rights in these discoveries would be for the benefit of all the people in America. Great head-

way is being made. If we find a way to convert salt water into fresh water it will be done for the benefit of everyone in America and the world.

We will not have some robber baron getting the benefit of the Government's money, but it will be for the benefit of 180 million people, done with the benefit of their tax money.

This amendment should be in the bill, just as it was in the saline water research bill. It should be included in this bill, just as it was in the bill on coal research, and in the bill which was passed on helium, which was in charge of the Senator from New Mexico.

In my judgment, this is one of the serious faults in Government where it raises the point: Are these tax moneys to be spent for the benefit of the public in general, or are they to be spent for private gain?

In my judgment, taxing the American people for the private gain of an individual is corrupt and should be prevented.

I know that the Senator in charge of the bill does not want that to happen. The best way to see that it does not happen is to take the provision which is patterned after all the provisions adopted previously in other bills to which Senators have agreed.

It is essential that this money be spent on research, and not be given away to some private individual at the expense of the public interest.

I believe that the Senator from Maine is willing to accept the amendment. I hope very much that he will fight for it, in the event that we have some difficulty persuading the House to take it.

Mr. MUSKIE. In response to the statement made by the Senator from Louisiana, the amendment was not considered at the committee hearings, so we did not have an opportunity to study it. Nevertheless, the fact is that the pattern has been established, in some instances, particularly with respect to the saline water research bill, and I am willing to accept the amendment and take it to conference, subject to such questions and

discussions as we may have on the floor.

Mr. AIKEN. I should like to ask some questions. To what extent was this amendment considered in the committee?

Mr. MUSKIE. As I have just stated, Senator, it was not considered at all.

Mr. AIKEN. No witnesses at all were heard on the bill?

Mr. MUSKIE. No witnesses were heard.

Mr. AIKEN. Is it important?

Mr. MUSKIE. It is important.

Mr. AIKEN. Then why was it not considered in committee, if it had been considered in other committees at other times? Why was it not considered in committee at this time? Is not this

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amendment more important than the Cooper amendment to which the Senator from Maine has taken strong exception?

Mr. MUSKIE. It is of the utmost importance, as the Senator from Louisiana has stated so eloquently.

Mr. AIKEN. But it comes in at the last minute. The Senator from Louisiana spoke of the robber barons. He spoke with reference to the oil companies, the uranium companies, and the helium companies. It seems to me ridiculous to vigorously oppose an amendment such as the one offered by the Senator from Kentucky on the ground that it duplicates the provisions in the Administrative Procedure Act, and yet accept the far-reaching amendment offered by the Senator from Louisiana. It is nonsense. It is ridiculous. We wonder who is back of it?

Mr. MUSKIE. Mr. President, will the Senator from Vermont yield?

Mr. AIKEN. I yield.

Mr. MUSKIE. The Senator is implying that I am speaking for someone who is hidden in the mists of obscurity. I am doing no such thing. So far as the Senator from Kentucky is concerned, I was not opposing his amendment vigorously. He was opposing my bill vigorously, and

I was undertaking to defend it against the allegations which he made as to its merit. That is all. I did not pillory the Senator from Kentucky, did not intend to do so, and do not intend to do so. What I did, in the case of the Senator from Kentucky, has no relevance to this question. I have indicated my attitude. The Senator can disagree with it or not. I see no reason for him to question my motivation concerning it. I stated that there was no hearing held on this point.

Mr. AIKEN. I do not question the Senator's motivation.

Mr. MUSKIE. I stated, in addition to that question, that there has been a pattern of some sort set in this respect in research programs sponsored with the Government's money, and that I was willing to accept the amendment and take it to conference for such consideration as the conference wished to make. I am not an advocate of the amendment. I could not be, because I have no basis for it.

Mr. AIKEN. The Senator from Maine is willing to accept the amendment offered by the Senator from Louisiana on almost the same basis that he was willing to reject the amendment offered by the Senator from Kentucky, on the ground that there is already provision for it, and that the precedent is established. I merely ask, what is the reason for bringing it in at this time when it was not proposed before the committee, and no one had been notified that the bill was coming up? I suspect that I will support the amendment. I am pretty sure that I would support the amendment offered by the Senator from Louisiana if it were offered on its own merits, but I will admit I am not happy about the manner in which it is being brought up at this time.

I am not an advocate of the oil companies, the helium companies, or the uranium companies. I believe that the amendment is probably a good one, but it should be offered in its own right and not sprung upon the Congress or the Senate without any previous considera-

tion being given to it.

Mr. LONG of Louisiana. Mr. President, several years ago I conducted hearings on the subject and informed the Senate that any time a bill came before the Senate which would provide for research, I proposed to raise this issue: Is this research going to be for the benefit of 180 million Americans, or for the benefit of one private corporation?

If we are going to tax the American people for the private gain of some company or a single individual, I propose to raise that issue.

Now we are about to authorize a research program. In 1947, 17 years ago, the Senator from Vermont [Mr. AIKEN] was a sponsor of an amendment along exactly the same principles I am for, on all Government research. He was fighting to defend the public interest in exactly the same way I see it.

An amendment was proposed in the National Science Foundation Act concerning this research, in order to protect the Government.

I salute the Senator from Vermont for having acted in the national interest in this fashion.

I raised this same issue on the coal research bill, and on the urban transit bill. I raised the same issue on the disarmament bill, and I am not in a position to know what these requests are going to accomplish.

Whenever a research bill is brought before the Senate the junior Senator from Louisiana can be expected to offer such an amendment and to raise the question whether the research will be for the benefit of the 180 million people of the country who pay for it, or whether it will be used exclusively for the benefit of private groups.

Something has been said about oil companies. I am not embarrassed to be called an oil Senator. Anyone who wishes to do so can call me an oil or gas Senator. I will continue to look after the interests of the State of Louisiana, just as I expect every other Senator to look after the interests of his own State.

The oil industry does its own research. It has never asked the Government to finance its research. It has never come to Washington to ask for money with which to conduct its research. If it ever does come I will offer my amendment to any bill of that kind that may be proposed. No one has any right to use Government money for his own advantage.

Who proposes to defend this practice?

The Lockheed Corp. has been holding out on the Government for 4 years on discoveries it has made with Government money. Who wants to defend a practice like that? Who wants to justify it? That research was paid for by taxpayer money.

Senators know that today we do not have a missile that can shoot down a Russian missile aimed at the United States. The reason could well be that important technical and scientific information has been withheld. The Lockheed Corp. will not tell us what it has found out in its research financed with tax money. They will not tell us what they have discovered with that money. If they can get away with this in dealing with the Federal Government, they can do this in dealing with the individual States.

The only way to stop this thing is to spell it out in the law by stating that they cannot get away with this sort of thing. What I propose has been done before. We did it in the Atomic Energy Act. It has created no problem in connection with that act. Frankly, Mr. President, if we look in the areas where the Government research has been in the public interest, with no private patents granted, we find that those are the areas in which we are ahead. In atomic energy, we are ahead. That research is available to everyone. No one can hold out on the results of research in that field.

In the field of agriculture we have had a research program without private patents. In that field we are far ahead of the Russians. They cannot possibly catch up with us, even with our help.

That is how far ahead we are in areas where we did it in the public domain.

Whenever we let certain individuals keep research results for as long as 4 years and have private patents, we cannot keep up with the Russians.

Here it is proposed to go on with a new research program which can allow someone to use his power with a Governor to see to it that Federal money is used for his private advantage, instead of in the public interest.

The Senate has acted on this issue time and time again during the past 2 years. Its answer has been consistent. Its answer today should be consistent also.

We are dealing with a new research program that is proposed to be established. The States will handle Federal money. If they discover something worthwhile, it should be available to every citizen in the country. The public should be given the benefit of its tax money.

I hope my good friend from Vermont will support the amendment, because he sponsored a similar amendment 17 years ago.

Mr. AIKEN. Mr. President, I have no doubt that I would support the proposal of the majority whip if it were properly offered. I object to the manner in which it is proposed and the manner in which it is brought before the Senate. We hear a great deal about precedents. I realize that there are many precedents. We have found some of them to be useful. However, most of our precedents have been established after mature thought and consideration.

What I am trying to do now is to ask that the Senate not establish the precedent of ramming major legislation down the throat of the Senate without previous notice or consideration. That is all I am asking.

I do not believe this is the place for this sort of amendment. No notice was given. The amendment was not printed. Let us not establish another precedent under which anyone in authority can

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ram major legislation down our throats without notice and without consideration.

Mr. PASTORE. Mr. President, I shall support the amendment of the Senator from Louisiana. The amendment is very simple. All that the amendment provides is that when taxpayers' money is used in research, anything that is discovered belongs to all the people. It is as simple as that. I cannot understand that we would be setting a precedent that should alarm anyone. It is a simple amendment.

What the Senator from Louisiana is doing is saying that where taxpayers' money is used in a research project the result that is discovered belongs to all the people because all the people gave money to the discoverer in order to have the opportunity to make the discovery. That is how simple the issue is.

I do not see why anyone should be alarmed about any precedent being established. I shall wholeheartedly support the amendment, in good conscience.

Mr. AIKEN. Mr. President, will the Senator yield?

Mr. PASTORE. I yield.

Mr. AIKEN. I am not opposing the principle set forth by the Senator from Louisiana. I am opposing the method by which it is being put forth. I object to anyone in official standing or even the whole party across the aisle ramming major legislation down the throats of Senators without previous notice or consideration. That is all I am saying.

Mr. PASTORE. We do it every time. We do it all the time.

Mr. AIKEN. It should not be done. I know it is done, but it should not be done.

Mr. PASTORE. It is done every time.

Mr. AIKEN. I know, but it should not be done.

Mr. PASTORE. It is no novel idea to bring up an amendment unexpectedly and by surprise. That is how a Senator can get his name on the front page.

Mr. MILLER. Mr. President, the Sen-

ator from Rhode Island has said that this is a very simple amendment. That is the difficulty with the amendment. It is too simple. It is not just a matter of whether or not we take taxpayers' money and turn it over to a private contractor to be used entirely for research purposes and the contractor does not spend any of his own money. We have no problems with that kind of situation. At least, I do not have any difficulty with it. It is not as simple as that. In some cases a contractor would receive \$100,000 from the Federal Government and he would put up another \$100,000, or perhaps \$200,000, \$300,000, or \$400,000.

Are the Senators from Rhode Island and Louisiana willing to say, because the Federal Government put up \$100,000 and the private contractor put up \$300,000, that it is fair that the whole result should go to the Federal Government?

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. MILLER. I shall yield in a moment. Are they willing to say that all of the benefit should go to the Federal Government? Last year there was a hearing before the Joint Economic Committee. The distinguished Senator from Illinois will recall that this very problem was raised and discussed at length by some of the witnesses. It was indicated that there were difficult problems in the allocation with respect to the results of research.

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. MILLER. In some cases a 50-50 division might be fair. In other cases an allocation of 100 percent to the Federal Government might be fair. In some cases it might be fair to give one-third, while in other cases it might be fair to give two-thirds. The problem is not as simple as that. That is the difficulty I have with the amendment of the Senator from Louisiana.

Mr. LONG of Louisiana. Does the Senator from Iowa know how the administrators use their discretion? Wherever administrators have had discretion, they

have given it all away.

Mr. MILLER. I would not want to apologize for what the administrators did in these matters. The Senator from Iowa and the Senator from Louisiana probably could get together on a fair and equitable allocation where it was indicated. The difficulty with the Senator's amendment is that, merely because \$1 of Federal money goes into some research project, the entire result would have to go to the Federal Government. I do not believe that is fair.

All of this is raising an increasingly serious problem. The Joint Economic Committee went into this subject last year.

Mr. LONG of Louisiana. The amendment states in effect: "If you have some background that you have obtained, we will protect your use of it." The provisions of the amendment are contained in the Agricultural Act, in the Atomic Energy Act, in the Tennessee Valley Authority Act; and in a great many other acts. Everyone who has been affected by it likes it very much. Those in Government who have had experience with it say that people come to them and put pressure on them. They may be people who have made large political contributions. They come and ask the administrators to give away the Government's rights. The Government can say, "No; we cannot do that."

That is how interested parties look at it. They do not want that type of discretion because there is so much in it for some contractors. The discretion would be used to give it all away. I make that statement because when administrators have had the discretion they have given it away. A proposal was made that before patent rights could be given away, a study should be made to determine the value of the right and knowledge of what would be given away.

Do Senators know what administrators would do? They would give away the results of research no matter what the right would consist of, for that is what has happened when discretion has been

given to them. If the Senate wishes to give the administrators discretion, we might as well give it all away and be done with it.

Mr. MILLER. The Senator has said, "I have not read the proposal," and then he refers to background patent protection. I am not talking about background patent protection. I am talking about patent developments that may grow out of specific research, the background patents to the contrary notwithstanding. We are not talking about the same problem. If the Senator wishes to refer to the background patents, all I am saying is that if the amendment offered by the Senator from Louisiana—and, incidentally, I think it would be most beneficial if all Senators had a copy to look at—had provided that instead of all of the benefits going to the Federal Government, language something like "the Federal Government's fair and equitable share in the information, copyrights, uses, processes, patents, and other developments resulting from that activity will be preserved," then I think we would have a fair and equitable amendment.

So far as uniformity with respect to other laws is concerned, I grant that the proposal is in line. But that does not mean that those provisions are right. Last year we had hearings before the Joint Economic Committee which indicated that serious problems were arising because of these other uniform provisions.

The Senator from Louisiana, I believe, could make a contribution if he would modify his amendment and let the House of Representatives look it over to see whether or not the proposal might be a step in the right direction in getting away from these harsh results. I believe it would be an improvement to do so, and I would support an amendment with that modification in it, because I think it would be an improvement. But I do not think that we ought to take a meat-ax approach to everything that happens as a result of research.

Mr. LONG of Louisiana. Mr. Presi-

dent, my friends on the other side of the aisle start by saying that the amendment ought to be studied, and that such a proposal should not be brought before the Senate as a surprise.

I point out that the procedure proposed has been adopted by Congress with relation to every research bill that has been passed during the past 4 years. We have done it repeatedly. It is identically the same language, so far as the requirements in the contracts are concerned, that we have voted for time and time again.

It is the suggestion of the Senator from Iowa that is on trial. That is the one that has not been tried. No one knows what his suggestion would do. We all know how my proposal would work.

Atomic Energy Commission contracts include a requirement that the result of research be available generally. Admiral Rickover has said that there has never been a problem. He has said he has too many contractors to do research for him. He has said that the difficulty is that he does not have enough contracts to go around.

Parallel work is being done on salt water conversion. That activity is almost identical with what we would attempt to do under the bill. We are trying to clean up water. The same problem in water control is involved. There

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has been no problems, however, with respect to the provision which I have proposed. It works fine.

The type of provision proposed, word for word, in the controlling section is identical with what has been the law for 50 years. If we insert similar language into the bill now before the Senate, we know how it will work. If we did it the way the Senator from Iowa has proposed, no one knows how it would work. If we inserted a provision permitting discretion, let us face it: We might as well give the results of the research away.

Let us include a provision that we

know has worked in the past.

Mr. MILLER. Mr. President, will the Senator yield?

Mr. LONG of Louisiana. I yield.

Mr. MILLER. I am not saying that my proposal is perfect. But I do think that it is pretty difficult to refute the point that the Federal Government is entitled only to its fair and equitable share, and to nothing more and nothing less.

The difficulty with the Senator's amendment is that he is proposing that the Government be entitled to everything. He falls back on the fact that a similar uniform provision appears in some other acts. But that does not make it right.

I am sorry that the proposal was not before the subcommittee for hearings. The subcommittee did a very fine job on what it had to work with. The bill is most complex. I would regret to see the bill go back for further hearings with respect to the Senator's amendment.

But what I would like to suggest is that the Senator either modify his amendment or be content to file it as a bill and let the bill before the Senate stand on its own two feet. Let us get it going. I am sure that the Senator could see to it that proper action would be taken on this bill. Let us do a job in this area for once.

I think the amendment needs study. I believe it needs hearings. I think it needs action, too, because the uniform provisions to which the Senator has referred have caused a considerable amount of difficulty.

If we say that administrators have abused their discretion and therefore we will not give them any discretion, I do not know how we are ever going to move. Great discretion is given to administrators. We have to repose a certain amount of confidence in their discretion, regardless of who the administrators may be. I believe it would be proper to give them discretion in cases such as the one we are now considering; and if there are abuses, we

shall clean them up, too.

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. LONG of Louisiana. I yield to the Senator from Rhode Island.

Mr. PASTORE. Is the Senator from Rhode Island correct in assuming that the money which will be devoted to research projects under the bill would be all public money?

Mr. MUSKIE. That is what we have in mind.

Mr. PASTORE. No private moneys would be involved?

Mr. MUSKIE. It is conceivable that we might find some situation in which some person has put his private money into a project, although that is not likely. But in the past we have had research programs in which a contractor would do the research—

Mr. PASTORE. How would it be conceivable that an individual would put his own private money into such a project?

Mr. MUSKIE. It is conceivable that private money would be involved. For example, with relation to the program involving the separation of storm and sanitary sewers, it is conceivable that some private organization might be interested in contributing a solution, a technique, or a formula, and would be willing to put up some of its money and some of its efforts provided it got some assistance from Federal, State, or local governments. In that event some private funds would be involved. I agree that it is not likely that it would be involved.

Mr. LONG of Louisiana. There is one slight difference between the proposal and existing law in other areas. Most of the statutes to which reference has been made that prevent the giveaway of patent rights provide that the information shall be freely and fully available. At the request of some departments the word "fully" has been omitted, so that a distinction could be made between the ideas that some people had already developed with their own private money



and that which they might develop with the Government's money. So if a contractor should desire a Government contract, he could come in and say, "This is what we know now. This is what we have done. We would like to protect our rights with respect to what we have developed."

But what will be done with Government money will be freely available to everyone in the country. I do not think we would desire much more flexibility than that. Otherwise we would get into the prospect of doing something of the kind that we have discussed, in which an administrator signs away the Government's rights entirely. That being the case, we have that much flexibility and do not want any more.

Mr. HRUSKA. Mr. President, will the Senator yield?

Mr. LONG of Louisiana. I yield.

Mr. HRUSKA. I have suggested to the Senator from Rhode Island that he consider the language in the second paragraph of the amendment. It would be helpful to us if we had printed texts. The language states:

Whenever any information, copyright, use, process, patent, or development resulting from any such research or development activity conducted in whole or in part with appropriated funds.

That means that if there is \$100,000 spent by the researcher and \$100,000 by the Government, the whole amount would have to be mandatorily disclosed to everyone—to the public—regardless of the contribution of the private researcher, regardless of security considerations, or anything else. That is the plain language contained in the first paragraph of the amendment.

Mr. LONG of Louisiana. Mr. President, the Senator has not read the rest of that section. If there is any question about who has the rights stated, the Attorney General can go into court. The reason for that section is so that, for example, he can subpoena someone in New Jersey to come to Louisiana, if need be, in order to testify to what he knows

about a situation. Otherwise, difficulty in subpoenaing witnesses might be encountered. The controlling section is the one prior to the section to which the Senator referred. That section would put teeth into the provision. There might be witnesses in New Jersey, Illinois, California, or other States. The provision would give the Attorney General the right to go into court and determine who possesses the rights, so that the Attorney General could subpoena a witness to come from, let us say, New Jersey to Louisiana in order to testify.

The procedural provisions are modeled after section 5 of the Sherman Act and section 15 of the Clayton Act. So the Attorney General, in trying to handle antitrust matters—and this is parallel to that situation—can send his witnesses from one place to another to testify to the facts. That is all that is sought to be done.

Mr. HRUSKA. Is any consideration given, in the first paragraph of the amendment, to matters which would enter the security field? Many research contracts are executed in the research field and might involve security. Is there some safeguard?

Mr. LONG of Louisiana. We are talking about water pollution. Can the Senator from Nebraska tell me what security item is involved in water pollution? What is there about cleaning up water that is secret?

Mr. HRUSKA. I do not know.

Mr. LONG of Louisiana. I have seen the old red herring dragged out on many occasions. But when Senators talk about cleaning up sewers, I do not see what that has to do with the national defense, except that cleaning up the water enables people to be healthier; and I do not know what is wrong with letting the Russians know about that.

Incidentally, the Russians invented a sleep machine. By putting electrodes over the eyes, a person can go to sleep. It might be useful when one has experienced a frustrating session in the U.S. Senate. I am told that 2 hours of sleep

under that machine is the equivalent of as much as 6 hours of natural sleep. The Russians obtained a patent on it, but did not raise a security question. So what is secret about how we clean up sewers? That is absolutely beyond me.

Mr. ERVIN. Mr. President, will the Senator from Louisiana yield for a question?

Mr. LONG of Louisiana. I yield.

Mr. ERVIN. Paragraph (3) starting on page 2 of the committee report, asserts that the bill authorizes among other things:

Research and development grants in the amount of 50 percent of the estimated reasonable cost of projects which will demonstrate new or improved methods of controlling the discharge into any waters of untreated or inadequately treated sewage or

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other wastes from sewers which carry storm water or both storm water and sewage or other waste. Authorize appropriations of \$20 million for the fiscal year ending June 30, 1965, and for each of the next 3 succeeding fiscal years for the purpose of making demonstration grants. A grant for any single project shall not exceed 5 percent of the total amount authorized for any 1 fiscal year.

If that is a correct analysis of the provisions of the bill, the bill contemplates that local governmental subdivisions and others will contribute at least 50 percent of the money for all the research projects in this area. Despite the great veneration the Senator from North Carolina has for his leader, the Senator from Louisiana, the Senator from North Carolina cannot conceive that it is fair to expect local subdivisions of government and others to put up at least 50 percent of the cost of research projects and then allow the exclusive rights to the patents on them to be given to the Federal Government, which puts up only 50 percent or less.

Mr. LONG of Louisiana. This section does not say anything about "50 percent." I do not see anything about "50 percent" in this section. I am seeking to amend section 6.

Mr. ERVIN. Does not the Senator's

amendment apply to the entire bill?

Mr. LONG of Louisiana. Let us look at the other side of the picture. Suppose a grant were given to Podunk, La., to conduct research, and that Podunk put up some money. Suppose it signed a contract that provided that when the contractor conducted research, he would be entitled to a private patent. Then suppose the contractor developed something good. He has the privilege of saying, "I found it. I found it first with your money." He would get the benefit of the law that would deny the Government the benefit for 17 years. He could say, "It is a fine thing, but I am not going to let anyone use it because I have the patent rights on it." He would have the right to license anybody to use it, if he wanted to.

Does not the Senator from North Carolina have some qualms about allowing \$20 million of Government money to be used and not permitting the public the use of the benefits?

Mr. ERVIN. The purpose of the bill is to encourage local subdivisions of government, and even private individuals and private industry interested in ridding our waters of pollution, to participate in the program to the extent of putting up at least 50 percent of the cost of research projects. In my judgment, the proposal of the Senator from Louisiana would discourage local subdivisions of government and private individuals and private industry from participating in the program if we say they will have to put up at least 50 percent, while the Federal Government would take all the benefits from the research.

Furthermore, there are many people with brains who have spent many years of study and research in the purification of water and the elimination of pollution from the streams of this country. The Senator's amendment would discourage those people from contributing their brains to research projects in this field, if there is written upon our law books a statute that the Federal Government would take the benefit of not only the

part of the research funds put up by the Federal Government and private individuals and private industry, but also the benefit of the brains of those people. Merely because the Federal Government contributes a portion of the cost, the amendment clearly contemplates that the Federal Government will take everything, so far as any discovery is concerned.

I favor the principle that the Senator is seeking to implement with his proposal, but I believe what has been said emphasizes the fact that this question ought to be dealt with by the Subcommittee on Patents of the Committee on the Judiciary in connection with an overall bill, where all possible arguments can be weighed according to their worth and value and where all interested officials and communities and individuals can be heard.

While I would support the Senator's amendment if it were restricted to instances where the Federal Government puts up all the money, I am unwilling to have the Federal Government require other States, municipalities, private individuals, and private industry to put up at least 50 percent of the money for research and then allow the Federal Government to take as its exclusive possession everything that is discovered.

The Senator's proposal ought not to be offered as an amendment to this bill, but ought to be considered by the appropriate committee, so that a general policy might be adopted. If the Senator's amendment comes to a vote as an amendment to this bill without any committee consideration, I shall have to vote against the amendment. The Senator's idea is a good one, but it ought to be carefully considered, and all objections should be weighed.

I thank the Senator from Louisiana.

Mr. LONG of Louisiana. I went before a subcommittee. I do not know whether I went before the proper subcommittee but I went before some subcommittee of the Committee on the Judiciary 3 years ago—in 1961. I went to

great efforts to explain my proposal, but nothing happened. That being the case, I felt that the committee would not report the bill. I decided that if it would not report the bill, I would offer an amendment on the floor of the Senate. That is what I have been doing for the past 3 years. If any Senator does not know by now how to get a committee to consider a research proposal, he ought to offer an amendment on the floor of the Senate.

Repeatedly, the managers of bills have offered to take my amendments and support them, and do what they could with them. That is what the manager of this bill has offered to do in this instance.

If the Senator from North Carolina wishes to invoke the procedure of a yeand-nay vote, that is all right; we will then see how the Senate stands.

My proposal does not seek to have the Federal Government take anything away from anybody. It merely provides that if the Federal Government contributes \$20 million, whether a city or a State contributes anything or not, the benefits should all be freely available to every city, State, and municipality, so that they can all have the benefit of the \$20 million to eliminate sewage pollution.

If a different procedure is followed, we shall be opening up the prospect of what I have just described. The General Accounting Office or some other agency will discover something that has been done improperly.

In the field of atomic energy, for 4 years that great man, Admiral Rickover, has been saying that the plan I am proposing has been working, and working well. It offers no problem or difficulty. The only trouble is that there are not enough contracts.

Mr. President, I read now from a committee print of the Small Business Committee's Subcommittee on Monopoly, of which I am chairman. This print is the text of a conference on Federal patent policies at which Admiral Rickover testified in 1960. He told me at that time:

We have had no difficulty in the Atomic

Energy Commission getting contractors, large and small, to do research and development work. In fact, many of them are constantly urging us to give them such work. Further, a number of companies have built their own facilities, with their own money. Many businesses want Government research and development work in order to develop a strong position. They now wish to extend this to the atomic energy and the space fields.

So, you can see, Mr. President, as I have stated before, where the Government retains patent rights for the benefit of all the public, there is no lack of contractors wishing to do the research. Instead, there is just a lack of contracts to go around to all of the contractors.

I am not saying that there is not someone who might not wish to conduct Government-financed research. That may well be. I salute anyone who does private research. But if such people want Government money, they ought to make the benefits of their research available to the United States.

I challenge anyone to show me where any information has been withheld, where any chicanery has been involved under the procedure I propose. Admiral Rickover told us on one occasion that the time lawyers take in preparing patent applications means that from the time one discovers something until the time he applies for a patent averages 4 years before a patent application can be filed.

This is information which the public needs for its own benefit, but some individual may be fooling around with papers to tie up the patent, so that no one can get the benefit except the private company.

On the other hand, if we say that the Government shall have the patent rights when the Government pays for the research, the information will circulate much more freely.

Mr. President, I felt that since the manager of the bill offered to take the amendment—which has been done time and time again—if there is going to be any opposition to it, then I suppose we shall have to have a rollcall vote on it, if we cannot agree on a voice vote.

So, I suppose I shall have to suggest the absence of a quorum and ask for the yeas and nays on the amendment.

Mr. JAVITS. Mr. President, will the Senator answer a question before doing that?

Mr. LONG of Louisiana. Yes.

Mr. JAVITS. The Senator stated that the language used was exactly the same as has been used in a number of other laws. I have found an example in the atomic energy law which is relevant to this matter.

Section 152 of the Atomic Energy Act of 1958 reads as follows:

An invention or discovery, useful in the production or utilization of special nuclear material or atomic energy, made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the Commission, regardless of whether the contract, subcontract, or arrangement involved the expenditure of funds by the Commission, shall be vested in, and be the property of, the Commission, except that the Commission may waive its claim to any such invention or discovery under such circumstances as the Commission may deem appropriate, consistent with the policy of this section.

There are other examples such as the National Aeronautics and Space Administration Act of 1958 and the National Science Foundation Act of 1950.

I know what the Senator said to NASA Administrator Webb. I, too, as Senator LONG did, sat in on the hearings before the Senate Small Business Committee. But, may I say as a lawyer—and Senator ERVIN has spoken as a lawyer—that the trouble with the amendment is that it is an immediate directive to the public domain.

This may sound appealing. But, it could work out very badly because the race would go to the swift rather than to the just.

The question that I put to my colleague, in view of the questions that are raised, is this: Even if a conference committee is to take the measure and try to do what they can do with it, should not the purpose of the Senate be to have such

patents and inventions vested in the Secretary, or whatever the operative Government agency is under this particular bill, rather than an immediate dedication to the public domain with some of the dangers which I have just spelled out? The financial involvement of the Government in a particular contract is an extremely important factor in a determination of patent rights under a contract; however, it is not the only factor. Whether the contractor has contributed substantial experience, background, and funds on his own and whether the invention would have been a probable result of his acquired skills, experience, and own funds should also be taken into consideration.

Mr. LONG of Louisiana. Mr. President, it is hard to satisfy all Senators. Senator MILLER just got through agreeing that we ought to have more flexibility in the provision. Now the Senator from New York reads a provision which he apparently seems to like, which is a stricter section.

The amendment that I offer is almost identical to the amendment which I offered on the Coal Research Act, which is the law, the Helium Act, which is the law, the saline water bill, which is the law, the disarmament bill, as passed in the Senate, and the mass transit bill as it was passed in the Senate and sent to the House, and the Water Resources Act.

This is what we have voted on time and time again. The section to which the Senator refers is in the Atomic Energy Act. In that case they do not waive background patents. The reason that the act did not waive background patents is that the Government had all the background, anyway. No one else had any. So we did not waive the background patents. In this instance, we have no problem.

I think we have discussed the amendment sufficiently. I ask for the yeas and nays.

Mr. MILLER. Mr. President, I have an amendment at the desk which is an amendment to the Senator's amend-

ment. I would like to have it read, and perhaps we can discuss it. I would appreciate it if the Senator would see fit to accept it. But I would like to have the amendment stated at this time.

The PRESIDING OFFICER. The clerk will state the amendment.

The LEGISLATIVE CLERK. The amendment of Mr. MILLER reads as follows:

Strike out lines 7 and 8, through the period on line 9, and insert in lieu thereof the following: "That the Federal Government's fair and equitable share in the information, copyrights, uses, processes, patents, and other developments resulting from that activity, will be preserved."

Mr. MILLER. Mr. President, the Senators may note that what this does is to change the language which now states that all information, copyrights, uses, patents, and other developments resulting from that activity will be made freely available to the general public.

Instead of saying "all," I have simply said that the Federal Government's fair and equitable share will be preserved in all of these things. I think it is a much more reasonable approach than the approach which the Senator's amendment uses.

Mr. LONG of Louisiana. Mr. President, will the Senator yield?

Mr. MILLER. I yield.

Mr. LONG of Louisiana. Mr. President, nobody under the sun would know what that would mean. For example, suppose a contractor has put up 1 percent of the cost, and the Federal Government and the State government have put up the other 99 percent. It could well be construed, from the Senator's amendment, that that fellow, because he has 1 percent of his own money invested, has the right to deny anyone the right to use it.

As the Senator knows, if I have an interest in a business and the Senator has an interest in the same business, both of us must agree in order that the information may be made available for anyone to use it.

The Senator has no answer to the

problem. No one under the sun would know what we are talking about here. If we use the Government's money to do the research, and if this is a Government contract, then the information should be free and available, to be used by everyone.

We have had some of these instances in which discretion was allowed to be used.

I submit that I do not know what that means. If we want that amendment, we may just as well vote against my amendment and be done with it.

Mr. MILLER. Mr. President, there are many provisions in bills which have been passed by this body which have used the phrase, "fair and equitable." The people administering the laws are the ones whose discretion we trust in the matter of determining what is fair and equitable.

I would not be quite as sanguine about this as the Senator from Louisiana.

Who else would do it except the Administrator? But what would happen under this kind of provision is that it would give the Administrator the discretion to sit down and negotiate such things. Certainly, if all of the research funds are going to come from the Federal Government, there will not be any negotiations. It is all going to go to the Federal Government. That is all there is to it. But, if there are very substantial funds to be put up by the private contractor, then this would give discretion to negotiate a fair and equitable share.

I do not know why we should have so much difficulty over this. I think it is a fair amendment. It is certainly infinitely more fair than the one that the Senator has now offered.

I am trying to be helpful. I am not trying to hinder anyone.

Mr. LONG of Louisiana. Mr. President, if the Senator wants to help, he would withdraw his amendment. As far as this Senator is concerned, I would just as soon withdraw my amendment as to have that amendment. We would have happen what happens when an ad-

ministrator is given discretion. That happened when we gave discretion to the Administrator in the Space Agency. What happened? He just signed a paper saying that it is all given away, without taking a second look. And when we give them discretion, sooner or later they will get an administrator in there who will find it easier to give everything away. I would not be surprised if they do not use pressure on the President to name an administrator who would give it to them.

Nobody has to take Federal money, but if they do take the Federal money, they are told of certain terms and conditions with which they must comply.

When they passed the civil rights bill, against which I voted, they did not say, "Under section 6, because the Federal Government is putting up half of the money, or two-thirds of the money, if you want some of the money, you must integrate one-half or two-thirds, according to the amount of money that is being paid." The bill provides that if the State wants the money, they must comply with certain conditions. No one is going to make us take the Federal money. But, if we do take the Federal money, we must comply, the same as all of the other researchers are made to comply with the law, which states that

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the information will be freely available for the use and benefit of 180 million people.

I hope the Senator will withdraw his amendment and vote against my amendment so that his position will be clear.

Mr. MILLER. Mr. President, I shall be willing to withdraw my amendment if the Senator from Louisiana is willing to withdraw his amendment. But, his amendment is what generated the whole controversy. I shall be fair about this. The Senator has a point. But he is going too far. I think that the reference to the Civil Rights Act is not at all analogous. Under the Civil Rights Act, it was determined by Congress that as a matter of

public policy, if there is a project that is tainted, then the whole project is tainted. But, this is not the same situation that we are talking about here.

The Senator's amendment is, in effect, saying that because one-tenth or one-third or one-half of the money is put up by the Federal Government, therefore all the results must go to the Federal Government. I do not think that is fair.

Mr. LONG of Louisiana. Mr. President, will the Senator yield for a question?

Mr. MILLER. I yield.

Mr. LONG of Louisiana. Was this amendment prepared by the legislative counsel?

Mr. MILLER. This amendment was prepared by a legislative counsel; namely, myself, here on the floor.

Mr. LONG of Louisiana. But it was not done by the men we employ to do that work. It was not done by the legislative counsel.

Mr. MILLER. How much time did I have to prepare it? I saw this amendment for the first time only 30 minutes ago.

Mr. LONG of Louisiana. Has the Senator discussed his amendment with any of the departments? Has he discussed it with the Department of the Interior?

Mr. MILLER. I have not had any more discussion with them than has the Senator from Louisiana.

Mr. LONG of Louisiana. I have discussed my amendment with those who will have to administer it. The Senator from Iowa offers his amendment when he has not discussed it even with his own legislative counsel and says this is what I would like to have adopted, when he does not know what will be the effect of the amendment. The one I have offered is one that the departments understand. This is the one that every department which would be handling this section of the bill is familiar with. There is a similar section of the law which the departments are complying with now. They advise that this is the way to do it.

The amendment of the Senator from Iowa would do nothing but completely confuse the matter and destroy the whole purpose of the measure, and he offers it on the floor at this time.

If he insists on having it voted on, we can do it, but it is my judgment that when the people of this country spend the money for research, they should have the benefits of it. I think we should vote on that issue one way or the other.

Mr. MILLER. I hope we are not getting ourselves into a position of deciding the merits of an issue on the basis of who drew the amendment or how little time there was or when it was drawn. Let us look at the merits of the proposed legislation. I am not the only one who has drafted amendments. The Senator from Louisiana has. I guess every other Senator has. It would not have been necessary if the Senator from Louisiana's amendment had not suddenly popped up on the floor with no copies available for Senators to read. I am trying to do the best I can under the circumstances. I am not trying to hurt the amendment of the Senator from Louisiana. I am trying to do what is fair. I think my concept of what is fair and the Senator's concept of what is fair do not coincide, but I am sure we are both sincere.

Mr. President, I move the adoption of my amendment to the amendment.

Mr. ERVIN. Mr. President, the objective of the bill is to create a great cooperative effort among the Federal Government and local governments and private industry to clean up the streams of America; and nothing should be put in this bill which has a tendency, or which could possibly have a tendency, to defeat the objective of the bill, which is to create a cooperative effort.

I feel that the amendment offered by the able and distinguished junior Senator from Louisiana would have a tendency to defeat the objective of the bill. The amendment offered by the Senator from Louisiana would properly fit a program in which the Federal Government

puts up all the money for research. But it does not fit this particular bill, because under the bill the Federal Government is not to put up more than 50 percent of the money for research. At least 50 percent of it is to be put up by local governments and by private industry or private individuals. To put such an amendment in this bill, without any more consideration than we are able to give to it on the Senate floor and without any more analysis than we are able to make on the Senate floor as to the effect of the amendment on the purpose of this bill, would be a tragic mistake.

We have delayed too long already one of the most important tasks which confront the American people, and that is the removal of pollution from the streams of this country.

Certainly it is not just, it is not fair, for the Congress of the United States to say to the States, to municipalities, to private industry, and to private individuals that the Federal Government is going to take all of the benefits of any discoveries made in the course of carrying out this cooperative program.

I do not know what effect the amendment of the Senator from Louisiana would have on this program, but I think it might possibly have a disastrous effect. Certainly, we should pass the bill in such a form as will enlist the cooperation of the States and local subdivisions of the States and the private individuals and industries who will have to put up at least 50 percent of the cost of the research.

Certainly, it would do no harm to pass the bill in its present form—and it is in excellent shape—and let the amendment offered by the Senator from Louisiana be studied by the appropriate committee to see what its effect might be, and to give all who are interested in this matter an opportunity to be heard by the committee before such action as this is taken. Surely the greatest deliberative body in the world ought not to act on the spur of the moment, without previous committee consideration

and without Senators even having copies of the amendment to read with their own eyes for the purpose of making an analysis of it.

The amendment is appropriate in the saline water bill, because there the Federal Government puts up all the money. It would undoubtedly fit some other programs in which the Federal Government puts up all the money. But it is not only drawn for a program which requires at least 50 percent of the money for research projects to be put up by States or local subdivisions of States or private industry or individuals.

Let us not, in a moment of haste and impatience, jeopardize not only the passage of a bill which is very meritorious, but also jeopardize its possible efficacy to perform the task for which it is designed.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Iowa [Mr. MILLER] to the amendment of the Senator from Louisiana [Mr. LONG].

Mr. LONG of Louisiana. Mr. President, the point has been made here that this proposal has been brought up on the floor by whim or caprice or without study. The committee had 2 days to work on the bill. The Interior and Insular Affairs Committee has handled similar bills and studied the same proposal. The Department which already handles such matters is already bound by the same language contained in the amendment. The Senate has voted on this question time and time again. It has voted not to give away to a private contractor the benefits of Federal research money.

The Senator made the point that cities and counties will be contributing money. If my amendment is not adopted, we shall be opening the door to letting a city take Federal money, do the research, find a way to clean up sewage more effectively than at present, and then be able to deny to 180 million people the benefit of that process for 17 long years—deny it to the people who paid for that



research with their own money.

Mr. President, it is inconceivable that we would let that happen. I am reminded of Ogden Nash's poem that "Rape is a crime unless you rape the voters a million at a time."

It is proposed to give up the taxpayers' money to a private contractor and permit the contractor to say to a little mayor: "Mr. Mayor, I was your best campaign contributor. I put up half your campaign money. But you have the money around this contract drawn up so that if I discover something, whether it affects the cleaning up of

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sewage or anything else, I get the benefit of all of it, I can charge the public a fortune for the 17 years and make a million dollars, and no one can say anything to me regarding the contract."

The Senator from Illinois [Mr. DOUGLAS] has just informed me that Chicago has developed the best method yet devised for cleaning up sewage, and that the city would be "tickled pink" if everyone in America could have the benefit of that method.

If Chicago is willing to do that, to make its discoveries available to the world, why should any other city wish to take Federal money and give it to a private contractor who could deny the public the benefit of it?

Mr. President, I should like to ask for the yeas and nays—

The PRESIDING OFFICER. The question is on the amendment of the Senator from Iowa [Mr. MILLER] to the amendment of the Senator from Louisiana [Mr. LONG]. The amendment to the amendment will be disposed of before the Long amendment is voted on.

The question is on agreeing to the amendment of the Senator from Iowa to the amendment of the Senator from Louisiana.

The amendment to the amendment was rejected.

The PRESIDING OFFICER. The question now recurs on the amendment

offered by the Senator from Louisiana [Mr. LONG].

Mr. MANSFIELD. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. ERVIN. Mr. President, I should like to speak for approximately 1 minute.

I believe that one of the analyses referred to in the bill is on page 5, lines 3 to 10 which provides:

There are hereby authorized to be appropriated for the fiscal year ending June 30, 1965, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose of making grants under this section. Sums so appropriated shall remain available until expended.

I especially invite the attention of the Senate to this part:

No grant shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year.

It will therefore be a small amount of money that the Federal Government will contribute to each project. Yet, we are about to vote on an amendment to discourage other people from participating in a program which would require them to put up the overwhelming bulk of the money for each project.

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The ACTING PRESIDENT pro tempore. The question is on agreeing to the amendment of the Senator from Louisiana [Mr. LONG]. The yeas and nays have been ordered—

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The result was announced—yeas 50, nays 28, as follows:

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So the amendment of Mr. LONG of Louisiana was agreed to.

Mr. JAVITS. Mr. President, on behalf of myself and my colleague from New York [Mr. KENNEDY], I send to the desk amendment No. 4, and ask that it be stated.

The VICE PRESIDENT. The amendment will be stated.

The legislative clerk proceeded to read the amendment

Mr. JAVITS. Mr. President, I ask unanimous consent that the amendment be not read, but printed in the RECORD.

The VICE PRESIDENT. Without objection, it is so ordered.

The amendment, ordered to be printed in the RECORD, is as follows:

On page 5, beginning with line 11, strike out all through line 17, and insert in lieu thereof the following:

"Sec. 4. (a) Subsections (b) and (c) of the section of the Federal Water Pollution Control Act herein redesignated as section 8 are amended to read as follows:

"(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act, (2) no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary. *Provided*, That the grantee agrees to pay the remaining cost. *Provided further*, That in the case of a project which will serve more than one municipality the Secretary shall, on such basis as he determines to be reasonable and equitable, allocate to each municipality to be served by such project its share of the estimated reasonable cost of such project, and shall then apply the limitation provided in this clause (2) to each such share as if it were a separate project to determine the maximum amount of any grant which could be made under this section with respect to each such share, (3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; and (4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the State water pollution control agency (A) as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs, or (B) for reimbursement pursuant to subsection (c)

"(c) In determining the desirability of projects for treatment works and of approving Federal financial aid in connection there-

with, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for any fiscal year shall be allotted by the Secretary from time to time, in accordance with regulations, as follows: (1) 50 per centum of such sums in the ratio that the population of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the urban population of each State bears to the urban population of all the States. Sums allotted to a State under the preceding sentence which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b) (1) of this section and certified under subsection (b) (4) of this section, shall be reallocated by the Secretary, on such basis as he determines to be reasonable and equitable and in accordance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made because of lack of funds. *Provided, however*, That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or activity. Any sum made available to a State by allotment under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second and third sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this section, except that in the case of any project constructed in such State after the date of enactment of the Water Quality Act of 1964 which meets the requirements for assistance under this section but was constructed without such assistance, such allotments shall also be available for payments in reimbursement of State or local funds used for such project to the extent that assistance could

have been provided under this section if such project had been approved pursuant to this section and funds available. For purposes of this section, population, including urban population, shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce.

"(b) Subsection (d) of such section 8 is amended by striking out the colon preceding the word 'Provided' and all after such colon to the period at the end of such subsection."

Mr. JAVITS. Mr. President, if Senators will give me their attention for a moment, I shall explain the amendment.

Mr. President, my amendment would:

First. Eliminate the existing limitation of \$600,000 for a single project or \$2.4 million for a joint project involving several communities on grants for construction of waste treatment facilities. It would also authorize an across-the-board Federal contribution of 30 percent of the cost of constructing these facilities.

Second. Eliminate the existing requirement that half of all construction grant funds be used for municipalities of 125,000 people or less.

Third. Establish a more meaningful standard for the allocation of funds for construction of sewage treatment facilities in urban areas of need. The amendment would set up a standard based on the ratio of the urban population in one State to the urban population in all States, replacing the existing criterion based on per capita income. Such a standard would bring about a more equitable distribution of funds to highly populated areas where major water pollution problems exist.

Fourth. Authorize the Federal Government to subsequently reimburse States and municipalities that have spent their own funds for treatment facilities when a Federal construction grant, which has been approved, cannot be immediately allocated because of inadequate Federal funds.

I point out that this proposed new allocation standard is different from the present law, which makes 50 percent available on the basis of population ratio

and 50 percent available on the per capita income ratio.

Mr. President, the reason for making these proposals is as follows:

The primary problems in water pollution in the United States are in areas of large concentrations of people. I understand the normal feeling of the Congress with respect to favoring the small places and the places of sparser population. But unfortunately that is not where the major problems reside. As the dangers of pollution exist far more pressingly in centers of population than they do in the less populated areas, it seems most ill advised—and experience has demonstrated it—to require mandatorily in the law, first, a distribution of the funds which does not bear a relation to the concentration of the problem and the need for Federal assistance, and secondly dollar limitations on individual projects which limitations inhibit some of the largest and most meaningful projects that could be undertaken in the United States.

For example, my State of New York is prepared to undertake a \$1 billion program, provided that certain limitations are removed, so that the Federal Government may contribute a straight 30 percent share, which in round figures would be approximately \$513 million.

Therefore the amendment would be a meaningful contribution to the overall results which this bill, if enacted, could bring about. Yet efforts like New York's and those of many other States are inhibited by the restrictions which are imposed by the dollar limitations incorporated in the existing Federal law, and which prevent these States from shooting at the target, which is where the water is polluted; namely, in heavily populated areas.

A single pollution control project in the city of New York has cost \$87.6 million. So we cannot even begin to think about meaningful attacks on the problem within the limitations of the present law.

[p 1540]

However we may feel—and, as I have said, I know the normal feeling which generally obtains; some Senators wish to be sure that the smaller communities get their share—the fact is that on this question we would not be hitting at the complete problem.

I support the increase of the dollar limitations in this bill. But more can be done. Governor Rockefeller has pointed out the enormous scale of works which can be undertaken in our State if we are enabled to do it by a law which really directs itself at the fundamental target which is involved.

I realize that the proposal represents a very major and a very important orientation of the impact of the bill. So I have discussed the subject with the distinguished Senator in charge of the bill, and I hope very much that he will give us assurances that the subject will have the kind of detailed and earnest consideration and hearings by his subcommittee, within a very short time, which this matter deserves, now that we have brought the matter so sharply to the attention of the Senate and the country.

Mr. MUSKIE. Mr. President, speaking for myself, and I believe for the other members of the subcommittee on both sides, we have assigned to the problem which the Senator has raised the highest possible priority. We intend to hold hearings during this session, and early enough so that we can get into thorough hearings on the question of the adequacy of the limitation on individual projects, on the allocations to the States, and on the overall authorization. What we are talking about, as I understand the Senator, is not only the question of how the present pie shall be divided, but how can we get a bigger pie to assure that we deal with the whole problem adequately.

The problems include not only those stated by the Senator, toward which I have the utmost sympathy, but also the problems related to the smaller communities in the cost of the projects. For

example, sewers are not eligible at all. Many times the cost of sewers is greater than the cost of the sewage treatment plant itself. The whole question of Federal aid in dealing with this problem financially is pertinent. I assure the Senator that I share with him the propriety and urgency that he has, and will press for early meetings. And I believe I am in a position to assure him that we will have such prompt hearings.

Mr. JAVITS. Is there any inhibition—sometimes it is a kind of unwritten rule which is understood—that the pending legislation (S. 4) is the only legislation that there will be in the anti-water-pollution field at the present session? Do we face any such inhibition, or is the committee virtually free to do whatever it, in its best judgment, deems desirable to be done with respect to this important program, notwithstanding the fact that we are now about to enact a set of amendments to the existing water pollution control law?

Mr. MUSKIE. I cannot, of course, speak for the attitude of the other body or even the administration. The Senator understands that. But so far as the committee is concerned, the question is one of the highest priority. When we began hearings on S. 649, the present fiscal authorization was only 2 years old. So we had not had the experience to justify attempting that problem when we began.

The bill (S. 4) is merely a reintroduction of S. 649 in the form that it took.

We are now in the 4th year of that program. I think it is time that we should get into the questions which the Senator has raised. As the Senator knows, we have progressively increased the ceilings from \$50,000 in the original bill to \$600,000 in the 1961 amendments, and to \$1 million in S. 4. Ten percent incentive for metropolitan areas would give an effective ceiling of \$1.1 million, and on combined projects, \$1.4 million. So I believe we have made a gesture in S. 4 that should give relief.

For example, in New York, the in-

crease of \$600,000 to the \$1 million limit would have brought 17 of New York's projects up to the 30 percent ceiling if those ceilings had been in effect when application was made for assistance for those projects. So this has a meaningful relationship: but I believe we must open up the whole question and come forth with a meaningful answer. I assure the Senator from New York of my cooperation.

Mr. JAVITS. I thank the Senator from Maine. As it is very clear to me that this is an effective way to resolve the question in terms of getting the most mileage for the problems which our State has, on the basis of these assurances which the Senator from Maine has so graciously given us, I withdraw the amendment.

The VICE PRESIDENT. Does the Senator from New York withdraw his amendment—

Mr. JAVITS. I do.

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The VICE PRESIDENT. If there be no further amendment to be offered, the question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed for a third reading, and was read a third time.

Mr. CLARK. Mr. President, may I say that the proceedings of the past 20 minutes make it abundantly clear that we need a more rigorous rule of germaneness in this Chamber than at present. Many Senators are sitting around, waiting to go home. I have already missed two airplanes, and I am about to miss a third plane. The entire matter that has been under discussion has had nothing to do with the bill.

I would like to ask the Senator from Maine a question which is pertinent to the bill.

Mr. MUSKIE. I should be glad to answer it.

Mr. CLARK. The Senator knows that one of the witnesses who appeared before the committee was Mr. James

Wright, executive director of the Delaware River Basin Committee. Mr. Wright requested the committee to insert a provision in the bill to make it clear that the Secretary of Health, Education, and Welfare was not authorized to promulgate standards applicable within a river basin which is under the jurisdiction of a Federal-interstate agency created by a compact to which the United States is a signatory party and vested with the authority to set and enforce water quality standards for such basin.

The proposed amendment appears on page 90 of the hearings. Mr. Wright gave four rather cogent reasons as to why that amendment should be adopted. The committee, in its wisdom, declined to adopt that amendment. However, in the report—and it appears on page 10—the statement is made:

Where the Congress has established multi-State compacts such as the Delaware River Basin compact with authority to establish standards of water quality it is not the intent of the committee that the Secretary's authority supplant that of the compact commission. Rather the authority in this measure to set standards should be held in reserve, for use only if the commission fails in its responsibilities.

I ask the Senator from Maine whether it is not clear, and can we not make it

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clear as a matter of legislative history, that the Interstate-Federal Delaware River Basin Commission, created pursuant to an interstate compact, in which the four States of New York, New Jersey, Pennsylvania, and Delaware joined, be free under this act, as it was before, to move ahead with all the authority given it by the interstate compact, to set its own standards?

Mr. MUSKIE. The Senator is correct.

Mr. CLARK. May I ask also whether the only way in which the bill would affect that authority would be if, in the opinion of the Secretary of Health, Education, and Welfare, the Delaware River Basin Commission was derelict in its

duties in setting standards, then the Secretary of Health, Education, and Welfare could, under this bill, move in and set his own standards?

Mr. MUSKIE. The Senator is correct.

Mr. CLARK. Mr. President, the Delaware River Basin Commission serves the Department of the Interior of the Federal Government. I wonder whether the Senator would take any exception to my comment that it would be an unusual case in which the Secretary of Health, Education, and Welfare would intervene to supersede the Secretary of the Interior, representing the Federal Government, or an interstate commission, unless the State members of that commission had gone against the strong desires of the Secretary of the Interior?

Mr. MUSKIE. I think it is a fair comment. I think it would be useful also for me to say that throughout S. 4, as in the Federal Water Pollution Control Act, there is a clear intention that primary responsibility for dealing with the problem shall rest at the State and local level, and that the purpose of the bill is to provide incentive, proper safeguards, and protection, and to stimulate action in this field, so that agencies, like the Chesapeake Bay Agency, are clearly vested with the primary and fixed responsibility of exercising initiative in this field.

Mr. CLARK. Mr. President, there is no intention to have the Federal Government, acting through the Secretary of Health, Education, and Welfare, supersede the existing State and Federal agency, created by Congress.

Mr. MUSKIE. No.

\* \* \* \* \*

Mr. LAUSCHE. Mr. President, I want to pose a question of the Senator from Maine, concerning the thoughts expressed by the Senator from Pennsylvania.

I am sure the Senators from West Virginia and Virginia and all the States in the Ohio River sanitation compact are interested in what the answer of the

Senator from Maine will be to my question. The signatories to the Ohio River sanitation compact are all of the States in the Ohio River Basin. The U.S. Government is also a signatory. That sanitation compact has done an extraordinary job in eliminating pollution in the basin.

Following the thought expressed by the Senator from Pennsylvania, my question is, Will the Ohio Valley sanitation compact be permitted to go forward with the elimination of the problem that is involved in the bill pending before the Senate without interruption from the Secretary of Health, Education, and Welfare except when the compact signatories fail to perform their duty?

Mr. MUSKIE. That is my understanding.

Mr. LAUSCHE. And is the answer of the Senator from Maine to my question identical with the answer given to the Senator from Pennsylvania?

Mr. MUSKIE. The only reservation I make is that I do not know the charter of the Ohio River Basin compact, but if the situation is the same, the answer is the same.

Mr. LAUSCHE. I assume, considering the State involved, the purpose is the same—to create an agency dealing with waters that cross state lines. It is that individual States having no jurisdiction over the waters that are beyond the State lines may create a regional compact.

Mr. MUSKIE. Yes.

Mr. HRUSKA. Mr. President, the Department of Health of the State of Nebraska sent me a copy of a letter dated January 20, 1965, addressed to the Honorable EDMUND S. MUSKIE, chairman of the Special Subcommittee on Air and Water Pollution, and signed by Dr. E. A. Rogers, director of health, in which it is stated that the board is unanimously opposed to S. 4.

I ask unanimous consent that the letter be inserted at the conclusion of my remarks.

The VICE PRESIDENT. Without

objection, it is so ordered.

(See exhibit 1.)

Mr. HRUSKA. Mr. President, it is my intention to vote against this bill, not only for the reasons expressed so well in the letter, but also because of the fact that the Cooper amendment was rejected by the Senate, which is highly essential to a meaningful and wise bill.

STATE OF NEBRASKA,  
DEPARTMENT OF HEALTH,  
Lincoln, Nebr., January 20, 1965.

Hon EDMUND S MUSKIE,  
Chairman, Special Subcommittee on Air and  
Water Pollution, U S Senate, Washing-  
ton, D C.

DEAR SENATOR MUSKIE Information has been submitted to us that you and several of your associates have introduced a water pollution bill identified as S. 4, similar to the bill S 649 of the last Congress

The water pollution control program in Nebraska is proceeding at a favorable rate, and is meeting current conditions to the satisfaction of both water users and those persons who are abating pollution by the construction of waste water treating plants to serve municipal and industrial wastes. At the present time there are approximately 30 sewer outlets that are discharging into Nebraska waters without treatment, and we have assurance from the municipal officials of these communities that they will attempt to meet our target date of July 1, 1966, at which time all wastes will be treated

At the same time we have enjoyed a pleasant relationship with industry in the treatment of their wastes to such degree that no major source of industrial waste is now being discharged without treatment

We are, therefore, fearful of any changes to the Federal Water Pollution Control Act that will change the program that is so well known to Nebraska citizens, and that is progressing in a satisfactory manner

We are especially concerned over the creation of a Federal Water Pollution Control Administration which will administer comprehensive programs, interstate cooperation and uniform laws, enforcement measures, and pollution from Federal Installations. We realize that these are all important sections of the Water Pollution Control Act, but we are of the opinion that the progress that we have made in the last several years is justification for maintaining the current program, and that any changes will, of course, create new methods of administration, a loss of communication between the various municipalities, industries, and State and Federal regulatory agencies, and even set up different means of procedures, all of which

will tend to delay the ultimate goal of stream pollution abatement

The Nebraska Water Pollution Control Council has adopted water quality standards, a copy of which is enclosed. These

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standards are being used continuously, are accepted, and, again, we are fearful that if Federal water quality standards are set up which might be inconsistent with our State standards, a delay during debate and explanation will ensue.

The Nebraska State Board of Health, at its January 18 meeting, considered the new water pollution bill and is of the opinion that the operations of Public Law 560, with its amendments, has been a great benefit to Nebraska citizens in the various details of administration, especially the Federal grants to municipalities

The board is unanimously opposed to the creation of a new Federal Water Pollution Control Administration, and the preparation and adoption of regulations on standards of water quality, interstate streams, or portions thereof

Yours truly,

E A ROGERS, M.D., M.P.H.,  
Director of Health,  
Secretary to the Board

Mr. ROBERTSON. Mr. President, no Member of this body is more interested in clear water, either from the standpoint of health or recreation, than is the Senator from Virginia. No one has been more active in that field. Over 40 years ago I organized an anti-water pollution commission to try to clean up the streams in the State, but I think this effort should be controlled by the States. I supported the Ohio Valley Compact, but that was under our control. I have supported research. I would gladly vote for the bill if it provided for research and for advice of Federal officials, but I would not want them to be able to put a small town out of "business" because it had a papermill located there or because they were not satisfied with what they were doing. If we had adopted the Tower amendment, Federal officials could give research and advice, but the final action would be for the States, and I would have voted for the bill. But I am not voting to put Virginia under direct Federal control

Mr. DODD. Mr. President, I am de-

lighted by the speed with which the Senate Public Works Committee has acted in reporting S. 4, the water pollution control bill.

The Senate passed essentially this same measure in 1963 by a vote of 69 to 11, but the bill died in the House when Congress adjourned last October.

Since water pollution is of increasing rather than diminishing national concern, I hope that we will now see prompt action by both Houses in rising to meet this problem head on.

No nation has ever risen to prominence, ever built a complex agricultural and industrial economy, or ever adequately fed its people without a plentiful supply of water. Indeed, wars have even been fought over this most precious of our natural resources.

Our country has been generously endowed with great rivers, lakes, streams, harbors, and a plentiful rainfall. Yet today we are faced with a serious crisis in regard to our water supply.

The problem itself is essentially a simple one: while our water supply remains basically constant, our needs and demands are increasing very rapidly year by year. It is estimated that in the near future our daily industrial, domestic, and other needs will exceed the greatest amount of water we can ever hope to make available through modern engineering and technology. This necessarily means that we must be able to use each gallon of water more than once. The present efforts to develop an effective and efficient means of desalinating sea water also point to the fact that in the future we must be able to turn to an additional source of supply.

While this constructive work is underway, the supply of water on which we now rely has become subject to many varied and serious forms of pollution. Municipal and industrial organic wastes, pesticides and toxic chemicals, infectious agents, sediments, and radioactive pollution are being discharged into our waterways. These contaminants reduce the quality of our water, making it often

unsuitable for reuse, and create a nuisance and a menace to health.

We now recognize water pollution as a serious national problem and have instituted programs of prevention and control. The 1956 Water Pollution Control Act and the 1961 amendments have given important impetus to action by all levels of government, and to cooperation between communities, States, and the Federal Government to combat pollution.

Nonetheless, in looking at our waterways across the country, it is evident that our efforts have not kept pace with the growing pollution problem.

One does not have to venture far here in Washington to find visible evidence of this. The beautiful Potomac River, winding through some of the most scenic countryside in the Nation, presents one of our most shameful and serious examples of this problem.

My own State of Connecticut has scenic lakes and rivers which are an integral and necessary part of our industrial complex. But here too we are plagued by pollution problems, even though programs of prevention and control have been established and in operation for some time.

Many people write to me about this, and I often see similar pleas in letters to the editors of our many newspapers—"Please do something to help clean up our rivers and streams and stop this shameful waste."

Pollution affects industry, urban and rural residential areas, sports and recreation areas, and the health and beauty of the Nation. It is imperative that greater steps be taken to expand the existing pollution control program and to prevent further contamination.

There are these three main aspects of pollution control which must be given serious nationwide attention. We need, first, more funds for the construction of new waste treatment facilities and the modernization of old systems; second, more intensive research into the effective treatment of new contaminants, those undesirable byproducts of our con-



tinuing technical progress; and, third, more effective administration and application of enforcement programs to control pollution.

This bill now before us would create a Federal Water Pollution Control Administration in the Department of Health, Education, and Welfare, thus providing a broader base and a national scope to the pollution control problem.

It would increase the Federal grants for research and development of new sewage treatment facilities, and increase the construction grants to individuals and municipal areas. These additional funds would provide the necessary stimulus for more intensive efforts by businesses, individuals, and State and local governments in coping with the problem.

The bill would also provide procedures for establishing quality standards for interstate waters, and would authorize certain abatement action when the shellfish industry suffers economic injury due to water pollution.

The water pollution problem, in the last analysis, must be dealt with locally. But it is evident that the seriousness of the situation and the size and expense of the project ahead demand national attention. The Federal Government must expand its efforts, must bear a greater

portion of the costs than before, and must be in a position to coordinate all of the work and research in this area.

This bill before us today is one of the most important and far reaching water pollution proposals ever considered by Congress.

I hope and expect that it will receive overwhelming approval by the Senate, and that through greater authority for the Federal Government to set and enforce standards, through increased grants and assistance, and through continued and improved local, State, and Federal cooperation we will be able to combat more successfully water pollution and assure this country an ample supply of clean water for the future.

The VICE PRESIDENT. The bill having been read the third time, the question is, Shall it pass? The yeas and nays have been ordered, and the clerk will call the roll.

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The result was announced—yeas 68, nays 8, \* \* \*

So the bill (S. 4) was passed.

\* \* \* \* \*

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#### 1.2h(4)(b) April 28: Considered and Passed House, Amended, pp. 8652-8690, 8736-8737

##### WATER QUALITY ACT OF 1965

Mr. MADDEN. Mr. Speaker, by direction of the Committee on Rules, I call up House Resolution 339 and ask for its immediate consideration.

The Clerk read the resolution, as follows:

##### H RES 339

*Resolved*, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to

provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes. After general debate, which shall be confined to the bill and shall continue not to exceed two hours, to be equally divided and controlled by the chairman and ranking minority member of the Committee on Public Works, the bill shall be read for amendment under the five-minute rule. It shall be in order to consider without the intervention of any point of order the substitute amendment recommended by the Committee on Public Works now in the bill and such substitute for the purpose of amendment shall be considered under the

five-minute rule as an original bill. At the conclusion of such consideration the Committee shall rise and report the bill to the House with such amendments as may have been adopted, and any Member may demand a separate vote in the House on any of the amendments adopted in the Committee of the Whole to the bill or committee substitute. The previous question shall be considered as ordered on the bill and amendments thereto to final passage without intervening motion except one motion to recommit with or without instructions

Mr. MADDEN. Mr. Speaker, I ask unanimous consent to revise and extend my remarks and include extraneous matter.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Indiana?

There was no objection.

Mr. MADDEN. Mr. Speaker, House Resolution 339 provides for consideration of S. 4, a bill to amend and expand the Federal Water Pollution Control Act. It would establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes. The resolution provides an open rule, waiving points of order, with 2 hours of debate, making it in order to consider the substitute now in the bill.

No more important single problem faces this country today than the problem of good water. Water is our greatest single natural resource. The issue of pure water must be settled now for the benefit not only of this generation but for untold generations to come. The need for good quality water for all of our Nation's uses—public and private—is a paramount one.

The Calumet industrial region of Indiana comprises the First Congressional District which I represent in Congress. It is the No. 1 congressional district in the United States in relation to industrial concentration in the Gary, Ham-

mond, East Chicago, Whiting area. Three major steel mills; Carnegie Illinois, Inland, Youngstown, and a number of smaller steel and smelter plants along with refineries of all major oil companies, and several hundred other large and small industries are located in this area. During the last quarter of a century these industries have expanded many times in production capacity. The major pollution to lakes and streams and especially beautiful Lake Michigan comes from the industrial waste from these plants.

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Adjoining the Calumet region on the north is the large industrial complex of the city of Chicago and the same statement can be made regarding the pollution and waste expulsion into the waters of Lake Michigan as exists across the State line in Indiana

The Hammond, Ind., Times reported recently a speech made by Richard Woodley of the Indiana State Board of Health. Mr. Woodley declared:

The people are fed up with pollution and they want something done about it right away regardless if the action is local, State, or Federal

Mr. Woodley is chief of the industrial waste section of the Indiana Board of Health

As examples of the heavy concentration of pollution in the area waterways, Woodley reported outfalls were detected on a daily basis in these amounts: Oil, 106,000 pounds per day of which steel industries were responsible for 90 percent and the oil refineries the remaining 10 percent; ammonia, 500,000 pounds; phenols, 5,000 pounds; cyanides, 3,000 pounds.

These examples show why there is a large-scale effort underway to halt pollution.

The drinking water supply for approximately 600,000 people in the Calumet region and millions in the Chicago area is taken out of the waters of Lake Michigan adjacent to the shores from which

this great industrial concentration is daily pouring industrial waste and other contaminating pollution into Lake Michigan. The health of approximately 7 million people in the Chicagoland and Indiana area is jeopardized and threatened by this inexcusable pollution into the formerly pure waters of Lake Michigan. Inland lakes and streams not only in this area but throughout Indiana, Illinois, and other States in the Union have already been contaminated by Government indifference toward enacting legislation to halt this health hazard to millions of our citizens.

The New York Times of April 18 had an extended three-page comment in its magazine section regarding the Raritan River in New Jersey. The Raritan River at the turn of the century was known as the "Queen of Rivers" with pure flowing waters coming from the mountains and hills without the least bit of contamination. An English poet, John Davis, described this river in the past century as the "queen of rivers." The article continued in stating that in the 1920's with the heavy concentration of industry and its depositing of waste and pollution from the towns and cities along its 100-mile shoreline, it became known as the "queen of sewers."

During the last 6 or 7 years, industries along this formerly "queen of rivers" have joined together in an effort to curb industrial waste from being deposited in the Raritan River. Great success has been accomplished by reason of the installation by these industries of modern methods to dispose of waste products and the river is gradually being restored to its former natural beauty and cleanliness.

The article further states that a complete recovery cannot be made until effective laws are passed to eliminate waste products from all industries along its borders, and it will, in a few years be restored to its title as "Queen of Rivers" with swimming, bathing, fishing, boating, and all the outdoor pleasures which its adjoining population took such de-

light and satisfaction in former years.

This Congress has made wonderful progress in legislation for the interest of millions of Americans so far this session. One of the real problems to be solved pertaining to the Nation's health is involved in this legislation pertaining to water pollution which we are considering today. It involves the health and welfare of every citizen in the United States regardless of whether he lives in an area that is a victim of pollution or out in the wide and open spaces where heavy concentration of industry is not a threat to outdoor recreations, and the welfare of wildlife, and enjoyment of which millions of our citizens have been deprived.

It has been nearly 9 years since the Congress, with the enactment of Public Law 669, 84th Congress, established the first permanent national program for a comprehensive attack on water pollution. The Federal role was fixed as one of support for the activities of the States, interstate agencies, and localities. The Federal Water Pollution Control Act authorized financial assistance for construction of municipal waste-treatment works, comprehensive river basin programs for water pollution control, research, and enforcement. It provided, too, for technical assistance, the encouragement of interstate compacts and uniform State laws, grants for State programs, the appointment of a Federal Water Pollution Control Advisory Board, and a cooperative program for the control of pollution from Federal installations.

The impact of the Federal Water Pollution Control Act has been impressive. It has taken us in less than 9 years from a situation in which untrammelled pollution threatened to foul the Nation's waterways beyond hope of restoration, to a point where we are holding our own. But that is not enough. The unprecedented and continuing population and economic growth are imposing ever-increasing demands upon our available water supplies. The accompanying

trends toward increased urbanization and marked rapid technological change create new and complex water quality problems further diminishing the available supplies. S. 4 is a further and necessary step in continuing efforts to bring about proper water pollution control and a full upgrading of the water quality of our streams, rivers, and lakes.

Mr. Speaker, I urge the adoption of House Resolution 339.

Mr. Speaker, under unanimous consent, I incorporate with my remarks excerpts from the April 15 edition of the Chicago Tribune on the meeting of 68 industrialists, sanitation experts, and Federal and State officials meeting in Chicago, Ill., March 2-9, to discuss Lake Michigan pollution:

Sixty-eight industrialists, sanitation experts, and officials of the Federal Government, and of Illinois and Indiana State and local governments, met from March 2 to 9 in Chicago to discuss ways to end the pollution

DANGER TO HEALTH

Celebrezze called the conference after determining that polluted water at the lower end of the lake and the streams feeding it "endangered health and welfare" in both Illinois and Indiana

Celebrezze said the pollution of the interstate waters of the Grand Calumet River, Little Calumet River, Calumet River, Wolf Lake, and Lake Michigan was "caused by discharges of untreated and inadequately treated sewage and industrial wastes"

Celebrezze and his staff had found that the polluted water from the heavily industrialized south end of the lake had crept dangerously close to the intake cribs of the Chicago water system.

Mr. Speaker, I reserve the balance of my time.

Mr. BROWN of Ohio. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, as the gentleman from Indiana [Mr. MADDEN] has explained House Resolution 339 makes in order the consideration of S. 4, as amended by the House Committee on Public Works, under 2 hours of general debate, an open rule, subject of course to amendments under the 5-minute rule and the full consideration of the House of Representatives.

Mr. Speaker, I have studied this legislation carefully as possible both as a member of the Committee on Rules and in my capacity as a House Member interested in the welfare of my own State.

Mr. Speaker, I have had considerable correspondence with reference to this legislation. I am convinced that the House Committee on Public Works has done a splendid job in rewriting S. 4, and that is exactly what has been done. The bill has been rewritten and greatly amended.

The bill itself would change the name of the Federal Water Pollution Control Act to that of the Federal Water Pollution Control Administration. It would further provide grants for research and development, increase grants for construction and necessary treatment works, authorize the establishment of standards of water quality, and aid in preventing, controlling and abating pollution of interstate waters, and for other purposes.

The great difference between the House and Senate versions of this particular bill is that the House Committee bill now before us—that is, amended S. 4—provides that the standards for water quality shall be fixed by the local communities, working with the State, rather than by a Federal authority having jurisdiction over the entire country. That seems to be a very, very important difference, because it does keep control of the standards of water purity and water quality within the hands of the people who are the most interested, those in each locality, in each watershed.

I want to point out also, that this bill will provide for an increase of \$50 million a year in the authorizations for the amount that can be appropriated for the purpose of making grants, gifts if you please, to different localities and their State system for sewage disposal plants,

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for the elimination of sewage waste and for the purification of the streams and rivers affected. That money would have

to be matched by State or local authorities. In other words, while the Federal Government would put up \$50 million, under the provisions of this bill, the States or the local communities would have to put up a like amount, so that there will be not only a local interest but a local investment in any project of this sort.

Of all the legislation I have seen brought to the floor of the House in recent months, this bill is probably the best thought-out and best prepared measure I have seen, and I want to take this means of publicly commending and congratulating the House Committee on Public Works for the accomplishments it brings before the House this afternoon for consideration.

Mr. MADDEN. Mr. Speaker, I move the previous question.

The SPEAKER. The question is on the resolution.

The resolution was agreed to.

#### IN THE COMMITTEE OF THE WHOLE

Mr. BLATNIK. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes.

The SPEAKER. The question is on the motion offered by the gentleman from Minnesota.

The motion was agreed to.

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill S. 4, with Mr. SMITH of Iowa in the chair.

The Clerk read the title of the bill.

By unanimous consent, the first reading of the bill was dispensed with.

Mr. BLATNIK. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, it was from this committee, the House Committee on Public Works, that the first substantial legislation involving water pollution control originated back in 1956, and one of the foremost leaders and sponsors of that legislation is now the distinguished chairman of our subcommittee, the distinguished, able and respected gentleman from Maryland [Mr. FALLON].

I yield such time as he may desire to the gentleman from Maryland [Mr. FALLON].

Mr. FALLON. Mr. Chairman, no more important single problem faces this country today than the problem of good water. Water is our greatest single natural resource. The need for good quality water for all our Nation's uses—public and private—is a paramount one.

The Committee on Public Works has been fully aware of this basic problem and from the committee came the first Federal legislation that brought into full focus the problem of water pollution control and water quality. The bill, S. 4, which the House will consider today, is one more step the committee believes in the continuing efforts to solve the great problem of water pollution and to provide for the use of good water.

It has been nearly 9 years since the Congress with the enactment of Public Law 660 in the 84th Congress established the first permanent national program for a comprehensive attack on water pollution. The opening phase of this program saw the Federal role of providing Federal assistance to local communities for the construction of sewage treatment plants. Since that time there have been further basic changes in the Water Pollution Control Act. At the present time the Federal Government is active in offering its good services in an effort to bring about proper control of those who would pollute our Nation's waters.

This program has proved to be a most effective one. Many miles of streams, rivers, and lakes of our Nation are now free from pollution as a result of the Federal assistance given during the last 9 years. Much more needs to be done. Much more will be done because I believe that we must find the means to fully and properly use our great God-given asset—the waters of this earth.

Water is industry's most valuable raw material and for our population growth, and by 1980 it will require twice as much as today. Water recreation has grown enormously during recent years as the leisure time and income of the American people has increased. They need this recreation outlet, yet each year more bathing beaches and water sports areas are closed because of pollution. The story is the same with sports fishing. Each year the number of pollution-caused fish kills grows higher.

There can be only one conclusion. This Nation is faced with a very critical problem of water pollution. You see it reflected in your daily newspapers, in your daily work, in your home districts, and here at the doorstep of the Nation's Capital.

S. 4 is, as I have said before, one more step along the way to the final solution to this great national problem. I trust this bill will pass and that we will continue to fight vigorously on all levels of government and in all fields of national endeavor both public and private until we have fully solved this problem.

Mr. EDMONDSON. Mr. Chairman, will the gentleman yield?

Mr. FALLON. I am glad to yield to the gentleman.

Mr. EDMONDSON. I merely want to express my personal appreciation for the very solid and thought-provoking analysis of the basic problem which confronts us in this field. I compliment the gentleman from Maryland who in his quiet but typically competent manner has brought to the floor of this House a bill which does represent very solid progress in an hour of great need.

I am pleased to be associated with the gentleman as a member of the committee which brought forth this bill.

Mr. FALLON. I thank the gentleman from Oklahoma.

Mr. BLATNIK. Mr. Chairman, I yield myself such time as I may require.

Mr. Chairman, the Federal Water Pollution Control Act became permanent law in 1956, bringing the U.S. Government into full partnership with the States and localities in a great national enterprise—the prevention, control, and abatement of pollution of the waters of the Nation. The law was strengthened 5 years later with the enactment of the Federal Water Pollution Control Act Amendments of 1961. To make the act a more effective instrument through which to stop the issue of pollution into the waters of America, to save clean waters from degradation, and to enhance the quality of waters already defiled is the purpose of the bill which we consider today.

S. 4, the Water Quality Act of 1965, comes before the House of Representatives with the unanimous favorable report of the Committee on Public Works. The bill is the product of careful committee consideration. We held 3 days of public hearings in February of this year, and had the benefit of the record of 12 days of public hearings on similar legislation in the 88th Congress. The testimony of witnesses presenting different viewpoints assisted us in our deliberations. The statements of Members of Congress, administration spokesmen, State, interstate, and municipal officials, conservationists, long the staunch advocates of clean water, civic organizations, industry, and other interests are on the record. S. 4 was introduced in the other body by the Senator from Maine, Mr. MUSKIE, for himself and 31 other Senators, and under his able floor management, passed that House on January 28 by a roll-call vote of 68 to 8.

The committee amendments to S. 4 were approved after thorough consideration. The active interest of the chair-

man of the committee, the gentleman from Maryland [Mr. FALLON], the diligence of members of the committee of both parties, and the support of many colleagues who joined me in introducing the legislation in the House, have been of immeasurable assistance in the development of the sound bill which we have reported. A little later in these remarks I will review the provisions of the bill and briefly discuss the principal committee amendments.

The quality of water and the quantity of water are closely intertwined. Between 1900 and 1945 total water use in the United States more than quadrupled from 40.19 billion gallons a day to 170.46 billion gallons a day. Between 1945 and 1962 it doubled again, to 343.42 billion gallons a day. The population nearly doubled from 76,094,000 in 1900 to 140,468,000 in 1945, and grew to 186,656,000 in 1962. On the basis of population growth and industrial production estimates, the Department of Commerce forecasts total water use in 1965 at 371.7 billion gallons a day, in 1970 at 411.2

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billion gallons a day, in 1975 at 449.7 billion gallons a day, and in 1980 at 494.1 billion gallons a day. A higher figure for 1980, 597.1 billion gallons a day, has wide acceptance, and experts talk of the possibility that by the year 2000, total water use in the country may reach 1,000 billion gallons a day. Our dependable supply of fresh water is about 315 billions gallons a day, which we expect can be increased to 515 billion gallons a day by 1980, and to 650 billion gallons a day by the year 2000 through water resources development projects. Let us do some simple arithmetic, and we will see that a water deficit of serious proportions is in prospect, 85 billion gallons a day short in 15 years, 350 billion gallons a day short in just 35 years. Are we going to run out of water? It is unthinkable that we should allow such a calamity to happen. The prospect of a scientific breakthrough which will make

the large-scale conversion of salt water to fresh water at a reasonable cost excites the imagination. There is another course, less dramatic, which we must exploit to the fullest. That course is the control of pollution, so that water can be used and reused for all legitimate purposes—for drinking water and multiple domestic uses, for fish and wildlife propagation, for water-centered recreation such as swimming, boating, water skiing, and sport fishing, for agriculture, for industry, navigation and power, and for the enjoyment beyond estimation of the sight of a sparkling lake or bay or river.

Now is the time to escalate the war against pollution. When we enacted the Federal Water Pollution Control Act not quite 9 years ago, rampant pollution prevailed in many parts of the United States. The act authorized a multi-pronged attack on the fouling of the Nation's waters—grants for the construction of municipal waste treatment works, comprehensive river basin programs for water pollution control, research, and enforcement. Technical assistance, the encouragement of interstate compacts and uniform State laws, grants for State programs, the creation of the Federal Water Pollution Control Advisory Board, and a cooperative program for the control of pollution from Federal installations have been other components of the national program.

Progress under the act has been impressive. We have established a beachhead, but there is many a battle to be won. As we have moved against pollution, the enemy has been aided by reinforcements—population growth, urbanization, industrial growth, new technology, and the effects on water use of a higher standard of living. Every major river system in the country is polluted. Pollution has not spared the Great Lakes, the largest fresh water source in the world. Lake Erie, the shallowest of the five, is so degraded that an enormous and costly effort will be required to restore the quality of its waters.

S. 4, as reported from the House Com-

mittee on Public Works, is a strong practical approach to water pollution control. Its provisions are well considered. Their implementation will have a decided impact on the nationwide campaign for clean water.

First. The bill adds to the Federal Water Pollution Control Act a positive statement of its purpose to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution.

Second. It gives the national water pollution control program an administrative placement commensurate with its importance through the creation within the Department of Health, Education, and Welfare of the Federal Water Pollution Control Administration, elevating the program from its present division status within the Public Health Service. The Secretary is to administer the act through the Administration, and with the assistance of an Assistant Secretary, is to supervise and direct the head of the new Administration, and the administration of all other Department functions relating to water pollution. A new position of Assistant Secretary is created. The Secretary is to designate the Assistant Secretary who shall assist him in the area of water pollution and to prescribe what additional functions he shall perform. Commissioned officers of the Public Health Service now assigned to the program may be transferred to civil service status with the Administration on their own volition and without loss of their rights and benefits.

Third. The bill authorizes a 4-year program of grants to develop projects which will demonstrate new or improved methods of controlling waste discharges from storm sewers or combined storm and sanitary sewers. This is a complex pollution problem which has plagued particularly the older cities of the country. The new program, to begin in the current fiscal year, is authorized at an annual level of \$20 million. Federal grants will be limited to 50 percent of the

estimated reasonable project cost, and no one grant may receive more than 5 percent of the total amount authorized in any one fiscal year. Contract authority may be used for the program's purposes, with up to 25 percent of the total amount appropriated for any fiscal year authorized to be expended by contract during this fiscal year.

Fourth. The bill doubles the dollar limitations on grants for waste treatment works construction from \$600,000 to \$1.2 million for a single project, and from \$2.4 million to \$4.8 million for a joint project serving two or more communities. The present 30 percent of project cost limitation on grants in existing law is not affected. For fiscal years 1966 and 1967, the 2 years remaining before the present authorization expires, the authorized annual appropriations will be increased from \$100 million to \$150 million. The first \$100 million will be allocated to the States on the basis of 50 percent population and 50 percent per capita income, as existing law provides. Amounts appropriated in excess of \$100 million will be allocated on a straight population basis. The requirement that at least one-half of the funds appropriated for each fiscal year must be used for grants to projects serving municipalities of not more than 125,000 population will apply to the first \$100 million, but will not apply to the additional amounts appropriated. Further, if the State matches the full Federal contribution made to all projects assisted from the additional allotment, grants from that allotment may be made up to the full 30 percent of project cost, without regard to the dollar ceilings. To encourage the orderly development of metropolitan areas, the bill authorizes the Secretary to increase the amount of a grant by 10 percent, if the project is in conformity with a comprehensive metropolitan area plan.

Fifth. The bill requires that in order to receive any funds under the act, each State must file with the Secretary within 90 days after the bill's enactment, a let-



ter of intent that the State will establish water quality criteria applicable to interstate waters not later than June 30, 1967.

Sixth. The bill requires the Secretary to invoke the enforcement authority in certain circumstances to abate pollution which results in substantial economic injury from the inability to market shellfish or shellfish products in interstate commerce.

Seventh. The bill strengthens the enforcement authority by empowering the secretary or his designee, at the public hearing stage of an enforcement action, to administer oaths, to subpoena witnesses and testimony and the production of evidence relating to any matter under investigation at the public hearing. The subpoena power does not extend to trade secrets or secret processes. Jurisdiction for obtaining compliance is vested in the U.S. district courts.

Eighth. The bill clarifies the authority and functions of the Secretary of Labor respecting the labor standards applicable to the act. It requires accountability for financial assistance given under the act in accordance with acceptable audit and examination practices.

Let me discuss some of the provisions of S. 4 a little more fully and point out the principal committee amendments to the bill.

S. 4, as reported, transfers the entire water pollution control program to the new administration. As passed by the other body, the bill requires the transfer of only selected functions. The importance of the total program and the interdependence of its parts indicate that it should be elevated intact to the higher organizational status, which is comparable to that occupied by other major Federal water resources activities. The 1961 amendments to the act vested in the secretary, rather than the Surgeon General, responsibility for the administration of the act. It was our intention at that time that it should be upgraded. In the interests of stronger administration, and more ready public identifi-

cation, there should be no further delay in the establishment of the new administration.

Statutory responsibility for the administration of the act will remain in the secretary. He will administer the

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act with the assistance of the assistant secretary of his designation and through the administration. He will appoint and fix the salary of the administrator, who will be in a civil service status.

Water pollution control, as an integral part of water resources management, will no longer be conducted within the service concerned with the public health of the Nation. Health remains an important consideration, and the committee has provided that the administrator shall consult with the Surgeon General on public health aspects of the program.

We have provided for the voluntary transfer to civil service status of commissioned officers now working in the program, with protection of their rights and benefits. Of the 4,900 commissioned officers under the jurisdiction of the Surgeon General, 373 would be eligible for transfer. To insure their retirement rights, a maximum of \$1,850,000 will be paid into the civil service retirement fund.

I do not wish to depart from this subject without paying tribute to the dedicated staff of the Federal water pollution control program in the Public Health Service, which has served so well during the important development years of the program. The new administration, to be established because of the importance of the work in which they have been engaged, is a recognition of their efforts.

The new 4-year program of research and development grants which is authorized by S. 4 will assist in the exploration of better methods of coping with the difficult pollution problem of the overflow from combined storm and sanitary sewers. Approximately 60 million people in some 2,000 communities are served by combined sewers and combinations of

combined and separate sewer systems. Estimates of the cost nationwide of separating combined sewers run from \$20 to \$30 billion. Other solutions to the problem may be technically feasible and less expensive. Grants to States, municipalities, or intermunicipal or interstate agencies to finance up to half of the cost of demonstration projects will be of immediate value to the recipient areas, and will foster the development of knowledge applicable in other areas. The committee amended this section of S. 4 to permit the Secretary to use up to 25 percent of the funds appropriated for the program each year to contract with individuals, private enterprise, research institutions, or public agencies for demonstration work on the combined sewer overflow problem. A heavy dose of pollution can be administered to the receiving stream in a short time from this source. The new program will encourage the discovery of solutions to a particularly difficult pollution problem.

In recognition of the higher per capita cost of waste treatment facilities serving smaller communities, and of their difficulties in securing financing for public works on favorable terms, the Congress authorized a program of grants for the construction of municipal waste treatment works which gave proportionately more assistance to those communities. Their less costly projects could receive the full 30-percent grant provided by law. The \$250,000 ceiling on the amount of a grant reduced the Federal share of larger projects to a fraction of 30 percent. When we passed the 1961 amendments, we raised the ceiling to \$600,000 and authorized grants to joint projects with a ceiling of \$2.4 million. Large projects still do not receive Federal assistance anywhere approaching 30 percent of total eligible cost. But it is in the metropolitan complexes of the Nation that the worst pollution exists. Large projects control more pollution from more people. In fairness to urban taxpayers, and in the interest of effective water pollution control, we should make more realistic

assistance available for these large projects. The committee has amended S. 4, to increase the ceiling for single projects to \$1.2 million, instead of \$1 million, and for joint projects to \$4.8 million, instead of \$4 million.

When we review the construction grants program prior to its expiration on June 30, 1967, we will consider how large the program should be, and what direction it should take. We know that it is not large enough, and so our committee amended S. 4 to increase by \$50 million the appropriations authorization for fiscal years 1966 and 1967. We know that it is not keeping up with the need in the urban complexes, and so we provided that the allocations to the States from appropriations made over and above the basic \$100 million would be on a strict population basis, and we did not extend to them the requirement that half the funds go to communities of 125,000 population or less. We know that to wipe out the backlog of needed facilities, and to keep up with population growth and plant obsolescence will take the best efforts of government at all levels. At present only a few States participate in the financing of waste treatment works. By offering a full 30-percent grant, without regard to the dollar ceilings, for projects made from the additional allocation in States which match the Federal contribution, we hope to encourage more and more States to bear a share of the cost of these desperately needed and extremely costly public works.

The committee believes that the question of adequate water quality standards is of high importance throughout the Nation. We have considered carefully whether they should be established and promulgated by the Secretary of Health, Education, and Welfare, or fixed by the States. There is an urgent need for standards of water quality applicable to interstate waters or portions thereof to insure that there will be water of a quality high enough to serve the maximum number of needs demanded by a growing population or industry. On the basis of

the exhaustive testimony taken this year and in the last Congress, we have amended S. 4 to give the States time to carry out their responsibilities for protecting the quality of the interstate waters within their respective jurisdictions. Waters arising entirely within a State, which do not flow into another State, and do not form a part of the State boundaries, are not deemed to be interstate waters and would not, therefore, be subject to any requirements respecting water quality criteria. Within 90 days after the bill is enacted, each State must file with the Secretary a letter of intent that the State will establish water quality criteria applicable to interstate waters or portions thereof within its jurisdiction not later than June 30, 1967. If a State fails to file such a letter of intent, it will receive no funds under the act until the letter is filed. We hope that the States will meet their responsibilities in this regard. The committee will consider additional water pollution control legislation in connection with the expiration on June 30, 1967, of provisions of the act. If the States have in fact met their responsibilities, they will be able to supply information of great value in the resolution of the water pollution problem.

S. 4 directs the Secretary to invoke the enforcement authority whenever he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution of interstate or navigable waters, and action of Federal, State, or local authorities. The provision would give recourse to persons who sustain economic loss because of a necessary ban on the shipment in interstate commerce of shellfish from polluted waters. The States must close harvesting areas found unsatisfactory for certification by the Public Health Service. The harvester, who is injured by necessary official action taken because of pollution which is not of his making and is beyond his control, should have the protection of official action in the abatement of that

pollution.

The committee has amended S. 4 to give new support to the enforcement authority, the function on which the success of other program activity may ultimately depend. The Secretary or his designee will be given power to subpoena witnesses and evidence which relate to any matter under investigation at the public hearing stage of an enforcement action. In the rare instances in which persons involved in enforcement proceedings fail to cooperate by furnishing needed information, the subpoena power will aid effective enforcement. Trade secrets and secret processes will not be subject to subpoena.

The 89th Congress in its first 100 days compiled a record of achievement which is compared to the first 100 days of the 73d Congress. A brave President, Franklin Delano Roosevelt, laid before the 73d Congress a bold program of far-reaching measures to bring the United States out of the depths of the despair wrought by the great depression. In a time of general prosperity, a brave President, Lyndon Baines Johnson, has laid before the 89th Congress a program to keep the Nation prosperous, to open opportunity to all of our people, and to improve the quality of American life.

Toward the third goal the President declared that we must act now to protect America's heritage of beauty. His brilliant message to the Congress on natural beauty expressed a sense of urgency about the massive pollution of the Nation's waters and the need for legislation to step up the fight to overcome it. In passing this bill we are stepping up the

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fight. The American people have thrown off the fetters of indifference which have for too long hampered the drive for clean water.

I recommend to the House the passage of S. 4, the Water Quality Act of 1965.

Mr. GROSS. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I will be pleased to

yield to my friend from Iowa.

Mr. GROSS. First of all I want to compliment the committee on what I believe is a good bill. However, do I understand the gentleman to say that you have now pulled together in one place all things related to water pollution and to the supply of fresh water, in the Department of Health, Education, and Welfare? Is that correct?

Mr. BLATNIK. Yes, sir. All the functions that were until now under the Surgeon General, with the exception of those aspects which deal primarily with health. The aspects dealing with health will be retained, as under the previous law, by the Surgeon General. However, there are other aspects of pollution control which are under the Interior Department, the Agriculture Department, the Corps of Engineers, and the Conservation Corps, over which we have no jurisdiction.

Mr. GROSS. There is still some proliferation, then, of these activities?

Mr. BLATNIK. Yes. We took certain of these aspects from the Surgeon General and put them under an administrator so that they will now be at a higher level of administration than they were before.

Mr. GROSS. But you did take these activities out from under the Surgeon General?

Mr. BLATNIK. Yes, sir. And we put them under an administrator who will be in charge of this feature.

Mr. GROSS. I thank the gentleman.

Mr. CRAMER. Mr. Chairman, will the gentleman yield for a further clarification?

Mr. BLATNIK. I am glad to yield to my colleague from Florida.

Mr. CRAMER. The legislation does require that the Surgeon General be consulted at all times in matters relating to and concerning health. Therefore, the Surgeon General does retain jurisdiction in effect over health matters. I ask the gentleman from Minnesota, Is that not correct?

Mr. BLATNIK. That is correct, and I

thank the gentleman from Florida for his contribution and clarification.

Mr. CRAMER. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I, too, am delighted to be able to join with the majority in unanimous support of this bill. It was supported unanimously by the majority and the minority. I think this is a clear-cut and outstanding example, particularly during this session of Congress, a shining example, where a committee when it is given the opportunity to do so without exterior interference, can do a good job and can come up with a bill that deserves the support of everyone in the House.

Of course, this has not necessarily been the case on all legislation that we have had before our committee, but this is a shining example where we were given an opportunity to work our will and we did so and I think came up with a sound and reasonable approach to what is admittedly a most serious problem throughout this Nation.

We are all for clean water, just as we are all for motherhood. We are all for doing what can reasonably be done to prevent water pollution. But as was stated when the legislation was initially passed by Congress back in 1956—and which, incidentally, I and others on our side cosponsored along with those on the majority side, which legislation first established the water pollution control program and the sewage disposal plant Federal grant program—it was specifically stated, and I believe this concept to be extremely significant and important, and must be maintained if this is going to be an effective program—that this program is one which must be participated in to the fullest extent not only by the Federal Government, in its proper jurisdiction, but by local and State authorities as well.

In enacting the initial law, the Congress said, and I quote:

It is hereby declared to be the policy of Congress to recognize, preserve, and protect the primary responsibilities and

rights of the States in preventing and controlling water pollution.

Now, in 1956 we had a bill which we could all support and did support in the committee.

In 1961 we had some differences of opinion as to what was the proper Federal responsibility in light of this statement of policy.

In 1965 we are coming before this body, this House, with a bill recognizing those basic principles and thus we are able to be in support of it both on the majority and on the minority sides.

Mr. Chairman, we had some difficulties with the consideration of the bill. Last year, of course, a quite different bill was voted out of the committee. This year a number of changes were made. There were some difficult problems with which our committee had to wrestle, but I am proud to say that I believe we did so successfully.

For instance, Mr. Chairman, we had to deal with the question as a result of having before us S. 4, the Muskie bill from the other body, we had to actually deal with the provisions of that legislation, and make necessary changes, for instance, in the field and on the question of Federal standards. That probably represented the most difficult problem with which we had to deal. However, I feel it was dealt with most successfully.

Mr. Chairman, I think it would be a grave mistake for the Federal Government to try to set, as was proposed in that bill, water quality standards on all streams throughout America, which amounts to the Federal zoning, which amounts to the Federal Government determining what use can be made of streams and lands adjacent thereto, a responsibility clearly recognized as that of the State and local communities throughout the history of America. This has been avoided in the pending legislation and successfully so in that the bill before us, in section 5, provides that in effect the States should be encouraged to accept this responsibility themselves and therefore there was written into

section 5 as a substitute for the Senate bill the provision that no State is to receive any funds under this act unless it files a letter of intent with the Secretary that the State, not the Federal Government—and continuing to quote:

The State will establish water quality criteria to be applicable to interstate waters and portions thereof within the State prior to June 30, 1967.

Mr. Chairman, I believe that is a sound and reasonable approach. It encourages the States to do a job which we all admit should be done if water pollution is to be controlled and if we are to have eventually the necessary clean water in America.

So, Mr. Chairman, I wholeheartedly—and so do the minority members of the committee—endorse not only that section but the balance of the pending bill.

We had some problems relating to subpoena powers. We had the question as to whether or not the Federal Government should have the power to subpoena State and local records, not at the hearing stage but at the conference stage where discussions are taking place relating to the enforcement of pollution abatement.

It was resolved, and I think properly and rightly so, at the hearing stage “yes,” at the conference stage “no.” And thus the subpoena power is properly given to the new administration at the hearing stage. That was successfully resolved in the committee. We had the question that was with us in 1961 and this year: Should the States be encouraged to match Federal funds in the treatment works construction program? I think it is conceded, and a correct statement of the gentleman from Minnesota, as to how tremendous this problem is which is facing the Nation. I think the estimate is something like \$5 billion as to what it would cost to catch up with the needed sewage plant construction program in America, let alone get ahead. To catch up it would require an estimated \$500 million or \$600 mil-

lion a year of local municipal funds alone to do the job.

This clearly indicates that the States should be encouraged to get in and help in this program. At this time it is mostly the Federal Government and the municipalities. The States are not involved except to set priorities. They are not required to provide grant money. Therefore it is plain, as we recorded it in the minority views on the amendments to the Water Pollution Control Act in 1961, that—

If there is to be any increase in the amount of funds appropriated for Federal grants it should be directed toward providing an effective incentive to accelerate needed construction by offering an inducement to the States to respond to their responsibilities and participate in the cost of treatment plants

If enlargement of the Federal grant program to construct local sewage treatment works is inescapable, then it is high time

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that the States face up to their responsibilities and assist in defraying the costs of such facilities.

This was in 1961. We offered amendments we hoped would accomplish that, but they were turned down in 1961. Amendments to at least partially accomplish that were adopted, and I think properly so, by the committee on the occasion of the consideration of this bill. So that the States are being encouraged to get into the program, to participate in the program, by the formula that was written into this legislation, relating not to the \$100 million authorization but relating to the increased \$50 million authorization. If the States want to exceed the top dollar limit for a project, which was doubled in this legislation for both single and combined projects, then they will be required to match Federal funds, in that way hopefully to bring the States into the picture and accept responsibility in it.

I am personally convinced if the job is going to be done, it is a bigger job than either the Federal Government or the local communities can handle in the near future. It is essential that the States

participate in the program.

We had also the problem to deal with, a serious one, of the objection on the part of many of the State agencies with regard to changing the administration setup, taking it out of the Public Health Service and putting it in the hands of a new administration. This was resolved, and I think reasonably so, by the amendment that was adopted that requires the new control administration to consult with the Surgeon General on all health aspects of water pollution control. Therefore, the Surgeon General and the Public Health Service will remain in the picture. They of necessity have to remain in it, and they have specific authority to do so under the language of the bill as voted out.

I do not intend to discuss in detail the bill itself. The gentleman from Minnesota has outlined what the bill does. I do have a couple of other comments to make.

This is not the last water pollution control bill we are going to have in the near future. There is going to be another one in 1967 for the obvious reason that authorizations run out in 1967 and additional authorizations will be necessary, probably to be considered in the early session of the 90th Congress, and other matters involving water pollution control can be considered and probably will be at that time. So this is not the last look at this problem that Congress is going to have, and perhaps rightly so. I think it is well for Congress to review from time to time these basic problems. We will have an opportunity to do so in 1967, probably.

With the fine work done by this committee, and I am confident it will be substantially supported in the House by the vote of the membership, it would be my hope that when this bill is passed in the House and we go to conference, there will be such an overwhelming vote for this legislation on the floor of this House that the hands of the conferees will be upheld and we will be in a strong position to demand of the other body that,

with such overwhelming support of this view of this legislation, we will be able to sustain the House position in conference, it being a sound and a proper position to take. So I am asking that this bill be passed with an overwhelming vote. I hope it will pass substantially in the form it is now and be sustained in conference.

I will now be glad to yield for any questions.

Mr. SAYLOR. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from Pennsylvania

Mr. SAYLOR. I want to take this opportunity to congratulate the members of this great committee on having worked and produced what I believe is one of the finest pieces of legislation on water and the problems affecting water that has ever been presented to the House of Representatives. The gentleman from Minnesota [Mr. BLATNIK], the gentleman from Alabama [Mr. JONES], the gentleman from Florida [Mr. CRAMER], and the gentleman from California [Mr. BALDWIN] are to be particularly commended for what I consider to be outstanding statesmanship

When you were holding your hearings, I know you were presented with many divergent views. When the committee had completed its hearings, closed the doors, and proceeded to mark up the bill, I am satisfied that partisan politics was laid aside. The Members on both sides of the aisle were determined to produce a good piece of legislation.

I sincerely hope there is a record vote on the passage of this bill, and that it will be supported unanimously in the House of Representatives. The other body should accept without question the House version and get this law on the books at the earliest possible date. Then the States and local municipalities will have more time in which to supplement this bill, and work on the problems in their immediate States and localities.

To all members of this great committee the Navy praise is appropriate. "Well

done."

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from Minnesota.

Mr. BLATNIK. I want to express my appreciation to the ranking minority member for his fine statement, and also to the gentleman from Pennsylvania, who for 10 years has been of great assistance in matters of water conservation and utilization.

Mr. CRAMER. I thank the gentleman.

Mr. BLATNIK. It saddens us deeply that the most dedicated, devoted, and honorable man in this body, if not in the entire Congress, in the field of many aspects of water utilization, preservation, conservation, and flood control, our dear friend ROBERT E. JONES, was so severely and seriously stricken a month ago.

I would like to point out that it was on the same evening when we were concluding the resolution of this highly controversial issue on standards and criteria in which the gentleman from Alabama [Mr. ROBERT JONES] played an important role and played a leading part together with our distinguished Member, the gentleman from Louisiana [Mr. T. A. THOMPSON], that we came to the conclusion, unknown to him, how seriously ill the gentleman from Alabama [Mr. JONES] was when he was taken to the hospital for extremely serious surgery from which he is still recovering. He is coming along most satisfactorily and I know we are all delighted to hear that. So at this point, Mr. Chairman, I ask unanimous consent that the remarks of the gentleman from Alabama [Mr. JONES] appear in the RECORD at this point.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

Mr. JONES of Alabama. Mr. Chairman, we have only to travel a few blocks to the once beautiful Potomac River to see that water pollution is an imminent and pressing problem at our very door-

step. But, unfortunately, the Potomac is not the only polluted river in our Nation. The citizens of this great land find this problem repeated at practically every doorstep. There is increasing pollution of our water resources by raw sewage, untreated industrial wastes and other refuse. It gravely impedes our Nation's full social, economic, recreational and community growth.

Voices of concern are being raised by industries which must have an adequate supply of clean water for continued economic well-being. Anglers are outraged by fishkills and the diminishing quantity and quality of aquatic life in streams and lakes. Water sports enthusiasts are shocked when they are directed to avoid certain streams at peril to health and safety. Housewives cringe at the foul odor of even hygienically safe treated water. Conservationists are repulsed by the disgraceful sights which mar the streams of our otherwise beautiful woods, parks, and recreation areas. Civic-minded groups everywhere are aware of the need for cleaner waters to meet the demands of our growing population and developing industries.

These voices of concern were raised in a plea for action time after time at the extensive hearings, over which I presided as chairman of the National Resources and Power Subcommittee of the House Committee on Government Operations last year. We heard similar testimony in the hearings by the House Public Works Committee on the bill which is before us today. Hundreds of concerned citizens, representatives of industry, and many State and local officials testified on the needs of improving our water resources. Their testimony demonstrated that despite some encouraging successes in the battle to abate pollution, concerted action must be taken on all levels of government and in all sections of the Nation if we are to hold the progress which has been made and then turn back the increasing tide of polluted waters.

Mr. Chairman, I endorse S. 4 with the

amendments reported by the House Public Works Committee.

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We need to upgrade the Federal water pollution control efforts to reflect the broad problems associated with conservation of our great water resources. S. 4 will do this by establishing a Federal Water Pollution Control Administration to be headed by an assistant secretary in the Department of Health, Education, and Welfare. This agency will be able to administer all matters under the Federal Water Pollution Control Act. It will be able to deal with the broad problems of pollution associated with conservation of waters for all uses, including municipal water supplies, fish and aquatic life and wildlife, recreational needs, agricultural and industrial requirements, and other vital needs. It will be able to fulfill the purpose of the act to "enhance the quality and value of our water resources and to establish a national policy for prevention, control and abatement of water pollution."

Our hearings indicate the solutions to our water pollution problems will not be simple or easy. The problems are complex and their solution also can be very expensive. For example, combined storm and sanitary sewers are a critical source of pollution in many of our cities. To eliminate this source of contamination by physical separation may cost the cities as much as \$30 billion unless new techniques can be found for handling the problem. We must provide for research assistance which is beyond the capability of the individual States or municipal governments.

The bill would authorize matching grants on approved demonstration research on combined sewers by States, municipalities, intermunicipal, or interstate agencies. These grants could be as much as \$1 million per project, and total \$20 million per year for 4 years. Furthermore, under the committee amendments, up to 25 percent of the same appropriation could be used for contracts



with various private or public agencies for research on this subject.

It was encouraging at our hearings to learn of the thousands of municipal sewage treatment facilities fostered by the Federal construction grant program. In the past 9 years, Federal grants of \$640 million have stimulated local governments to provide treatment facilities costing more than \$3 billion. Every dollar of Federal aid resulted in \$4 of local spending. This aid went to 6,028 projects which serve 48 million people. The rate of treatment plant construction has been almost doubled since the Federal program was begun. But as impressive as these figures are, our cities are still woefully short of the needed sewage treatment facilities. The backlog of needed facilities grows every day. Recent figures show that 1,470 applications, totaling \$181.3 million, are now pending for treatment projects that will cost \$904.1 million.

Population is increasing rapidly. Our cities are growing even more rapidly. Great demands are made on these municipal governments for improvements of services. And, whether we like it or not, city officials who are besieged by many problems are often tempted to give sewage treatment facilities a low priority. After all, the city can dump the sewage downstream where it presents no immediate threat to its citizens. Then only the water users farther downstream have to worry.

Limitations of existing legislation were pointed out in our hearings. Dollar ceilings of \$600,000 on individual project grants and \$2.4 million on multimunicipal project grants have inhibited local action in the larger cities where the cost of adequate facilities runs to many times the Federal portion. The ceilings also have tended to encourage smaller, sometimes less efficient, plants where larger facilities would have meant savings in the long run.

To advance this needed treatment plant construction and stimulate municipalities to end this source of water pol-

lution, S. 4 as reported, will double the maximum construction grants to \$1,200,000 for a single project and \$4,800,000 for multimunicipal projects, provided the grant does not exceed 30 percent of the reasonable project cost.

The grant program has 2 years remaining under this act. If we are going to make a dent in the backlog of needed treatment facilities, the appropriation for these grants must be increased. S. 4 will authorize additional appropriations of \$50 million a year for the next 2 years and bring the total authorized to \$150 million annually. I believe these increases are not excessive. Indeed, they are truly minimal in light of the great national needs. The first \$100 million in grant money will continue to be allocated under the existing formulas which insure more grant money for the smaller and medium-sized cities. Funds over \$100 million will be allocated to the States on a population basis and thus allow for more substantial grants to the larger cities where the greatest need for improvement exists.

The main purpose of these grants is to stimulate local action. The bill, as reported, provides extra inducement where a State provides funds to cities, matching the Federal grants, for treatment plants. In such cases, the dollar ceiling limitations on grants, up to 30 percent of project costs, would be removed from the appropriation of the extra \$50 million.

To encourage further economies and efficiencies, the bill provides a 10-percent increase for projects certified by State or regional planning agencies as conforming with the comprehensive plan for a metropolitan area when the President determines the area is appropriate for such increase.

S. 4 also takes a first step toward the establishment of critically needed water quality standards. As passed by the Senate, S. 4 would give the Secretary of Health, Education, and Welfare authority to establish standards for interstate and navigable waters. However, during our

hearings, many witnesses representing many industries and many State agencies testified that such additional power on the Federal level is unnecessary and undesired; that it would be time consuming and costly to establish such standards; that the standards might be unrealistic because every stream, and even every segment of a stream, varies in its uses and in the amount of waste it can safely absorb; that these considerations require great familiarity with a multitude of diversified factors; and that the individual States should have greater proximity to these problems.

The reported bill, therefore, places on the States the responsibility for establishing the criteria for water quality within the State.

The acceptance by the States of this responsibility will be of great value in helping to solve the water pollution problem and will provide valuable information for consideration of new legislation when important provisions of the existing law expire in 2 years. Any State which fails within 90 days to file a letter of intent to establish such criteria before June 30, 1967, would not receive any Federal grants for its water pollution program.

At our hearings, representatives of the shellfish industry, which is highly dependent on clean waters, have repeatedly urged additional Federal action on interstate or navigable waters to curtail pollution which is cutting into the livelihood of the industry. This will authorize the Secretary of Health, Education, and Welfare to take action when he finds that substantial economic injury results from the inability to market shellfish in interstate commerce due to health threats resulting from pollution of these waterways.

To strengthen abatement efforts, the bill also empowers the Secretary of Health, Education, and Welfare to subpoena witnesses in matters under investigation when the procedure reaches the public hearing stage.

Mr. Chairman, our hearings demon-

strated that many industries are taking steps, often at great expense, to end or reduce the polluting effects of their manufacturing processes. The detergent industry is an excellent example of how self-regulation can shortstop the need for more Government regulation. Within the year, the industry will have changed from stream polluting hard detergents to a new product which can be handled in existing sewage treatment facilities. The end of the unsightly foam on our streams from these hard detergents may be anticipated in the near future. I strongly urge all industries to step up their antipollution efforts. The need for the control of industrial wastes is a great and pressing national problem.

Mr. Chairman, the scope of the water pollution problem is so great as to require the enthusiastic cooperation of all official and unofficial segments of our society. S. 4 as reported by the House Public Works Committee, seeks that cooperation, especially in regard to greater State participation. Some groups have urged stronger and more sweeping Federal powers than are included in this bill. Some have urged less. I believe that S. 4 as reported, is an equitable, workable, and necessary step if we are to attack this single most desperate natural resources problem facing the country today.

I urge adoption of this bill.

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Mr. THOMPSON of Louisiana. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I am pleased to yield to the gentleman from Louisiana.

Mr. THOMPSON of Louisiana. Mr. Chairman, I would be remiss if I did not associate myself with the remarks of the gentleman from Minnesota not only in regard to this legislation but in regard to his remarks about the Honorable ROBERT E. JONES of Alabama.

I do not know of a man who is possessed of more of the qualities of leadership in this body and who can be more persuasive and who is possessed of a vast

knowledge gained over many years of experience than our colleague, the gentleman from Alabama [Mr. JONES]. I am happy to have the opportunity to work with him, and I am happy also to report that he is doing so well that he is back in Washington today and, of course, we all hope that he will certainly continue to be with us for many, many years to come.

Mr. Chairman, if the gentleman from Minnesota will yield further, I do want to say, too, as a Louisianian, that our State of Louisiana is a recipient State when we speak of *this problem of water pollution* because, as a matter of fact, two-thirds of all the water that flows in this Nation and whatever pollution is in it flows through my State. So you can well see that if anyone or any State is interested in the abatement of pollution and the control of pollution, my State of Louisiana certainly is greatly interested.

Water pollution is a serious threat to the welfare of our country, and the critical need for clean water in our Nation's rivers and streams has been brought to the forefront with sober emphasis. We of the Public Works Committee, after long hearings and lengthy deliberation, feel that the bill as we reported it provides the best solution to the pollution problem. The House committee version includes a provision which allows the individual States to establish water quality control criteria, in lieu of having nationwide Federal standards.

Our extensive hearings clearly demonstrated the necessity for upgrading the Federal water pollution control effort. To satisfactorily eliminate the existing problems will require full and close cooperation between local, State, and Federal Governments. In recognizing that the problems within the various States are different, the House version points up the important responsibility of the States in the matter of pollution control and gives them an opportunity to establish water standards most suitable to their specific needs and problems. I believe the States can, and will, effectively as-

sume this vital task, and actually, the Federal Government could not proceed as quickly as individual States can under this bill in establishing a National Inventory of Water Quality.

Another aspect of this bill authorizes a 50-percent increase in the total funds which may be appropriated for grants to States for construction of sewage treatment plants in cities, and would double the dollar ceilings on both municipal and multimunicipal projects. Recently there has been a noticeable increase in the number of such plants constructed throughout the United States, and there is a tremendous number of applications currently pending for municipal sewage treatment facility grants. These applications greatly exceed the amount of funds available. By increasing the appropriation and providing a greater availability of funds, treatment plant construction would be stimulated in all industrial areas where the most serious pollution problems exist. In Federal-State matching fund projects the bill would provide a 30-percent grant from the increased funds for treatment plant construction.

I believe that the bill as reported—placing the authority for water control criteria in the States, along with the other provisions made by the House Public Works Committee—is the most desirable means of reaching the goals we realize are vitally necessary and prove a giant step forward in the attack on, and the eventual elimination of, the water pollution problem.

My people in Louisiana are satisfied with this approach that is being made through this legislation. As a matter of fact, they have already commended me and all of the membership of this committee and have so advised me. Our Governor is working on this matter through our stream control commission. They have done a splendid job and they have asked me to extend to the entire membership of the Committee on Public Works of the House of Representatives their appreciation of what has been

done.

Now, Mr. Chairman, this legislation could not have gone through without the bipartisan approach that was taken. I have great pride in being a member of the House Committee on Public Works. For many reasons, but especially because this legislation which approaches this problem in an attempt to attain the same goals that the other body is seeking, I hope inasmuch as our committee has approved this legislation and sent it to the floor of the House by a unanimous vote that the House would take the same action.

I also want to say that this legislation as it is now presented would not have been possible without the help of the hard working and enlightened staff that we have on our Committee on Public Works.

Mr. BLATNIK. I thank my colleague from Louisiana.

Mr. THOMPSON of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I am pleased to yield to my very dear friend, the gentleman from New Jersey.

Mr. THOMPSON of New Jersey. Mr. Chairman, I think the Members of this body are indebted to the great Committee on Public Works, which enjoys a unique distinction in that, at least in the years I have had the honor of being a Member of this body, the committee has never lost a piece of legislation. This is a great tribute not only to the committee's parliamentary skill but to the thoroughness with which it approaches legislation. I think also the tributes to our colleague, the gentleman from Alabama [Mr. JONES], who has been ill, are particularly well deserved. There is not in this body a more sophisticated or more persuasive or more knowledgeable negotiator than ROBERT E. JONES of Alabama. I find myself not always in agreement with that distinguished gentleman, but I find myself without exception admiring of him and really too many times persuaded by his enormous skill which was demonstrated earlier in the handling

of the Appalachia legislation and in this particular area in which we are legislating today. ROBERT E. JONES has made great and lasting contributions to Alabama and the Nation in many fields. He is this body's leading expert on the TVA, on Appalachia, and in water resources legislation.

In this particular area in which we are legislating today, he has a background of many years of service, especially with respect to technical knowledge of the subject, which he has so well at his command. I am sorry he has been ill, but am delighted by his recovery. He deserves the thanks of all of us. ROBERT E. JONES is one of the truly great public servants of our time.

Mr. BLATNIK. I thank the gentleman from New Jersey. I appreciate his remarks.

Mr. Chairman, the gentleman from Missouri [Mr. RANDALL] worked very closely with Mr. JONES and several others, particularly those on the Subcommittee of the Committee on Government Operations. They have held, without question, most intensive public hearings in several major areas of the United States.

I am pleased to yield at this time to the gentleman from Missouri [Mr. RANDALL].

Mr. RANDALL. Mr. Chairman, I appreciate being granted some time by the floor manager of this bill, the gentleman from Minnesota.

I rise in support of the Water Quality Act of 1965 and in tribute to a member of the Public Works Committee who was also my chairman in the Subcommittee on Natural Resources of the Committee on Government Operations, the gentleman from Alabama [Mr. JONES].

Under delegation of authority by the chairman of the Committee on Government Operations, the gentleman from Illinois, our dear friend BOB JONES conducted 2 full years of hearings both here in Washington, D. C., and from coast to coast in 1963 and 1964. These hearings and his other activities properly put Bob's name in the forefront of the fight

for pure water. It was my privilege and honor to have served as a member of that subcommittee. We held hearings in Trenton, N.J.; Hartford, Conn.; Chicago, Ill.; Seattle, Wash.; Austin, Tex.; Muscle Shoals, Ala., and Kansas City, Mo.

We all know that BOB JONES has been stricken as a result of a serious operation, but it is good news to know that he is now recuperating. I know that every Member is pulling for his speedy recovery and his quick return to his duties here in the House.

To dramatize the harsh fact that we are soon going to have an acute shortage of pure water in this country, the gentleman from Alabama had a simple illustrative formula. He said there were three factors involved which could be

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three factors involved which could be treated like an ordinary, simple division problem. In the first place, he said, there is a divisor—and that is the population. The dividend is the fixed quantity of water, and it cannot easily be increased. As the population increases, the divisor goes up and is divided into the dividend, which remains static. As a result the quotient becomes smaller and smaller. That quotient is the amount of pure water each of us will have to use over the years ahead.

It was such clear and simple logic as that which pinpointed attention and focused the interest of the people from coast to coast on the importance of this problem.

Mr. Chairman, I would like to summarize a few of the findings and accomplishments of the Subcommittee on Natural Resources, but I first wish to compliment the gentleman from Minnesota on the thorough and competent job his committee has performed in improving through amendment S. 4, the bill sent here from the other body. The problems of drafting equitable Federal legislation to assist in abating and controlling water pollution are complex and controversial.

It is evident the Public Works Committee has negotiated these problems with great skill and has reported a bill which will foster genuine progress in the field of pollution control and yet will not overstep the proper limits of Federal authority.

If I had to characterize the accomplishments of the Subcommittee on Natural Resources in just a few words, I would say that Mr. JONES' subcommittee gave the people of the United States a picture in proper perspective of Federal, State, and local water pollution abatement efforts.

In the first place, the Natural Resources Subcommittee created a forum in which citizens all across the country could express their concern about water pollution and in which responsible public and private officials had to justify their actions in the field of pollution control. Those who testified included Federal, State, and local officials or representatives, sportsmen and wildlife enthusiasts, and members of several civic organizations including the ever present League of Women Voters.

The fact that these hearings were held by an arm of the legislative branch of the Government added to the importance of the forum. We were able to make this forum effective because as a subcommittee, we were an agency of the Congress working on a problem of national importance. For this reason we gained attention and response that no administrative official could have commanded.

In the second place, the subcommittee was able to pinpoint some of the difficulties connected with the concept of national water quality standards. At first some of the members were surprised to find out most of the areas in our country were opposed to the establishment of a Federal water standard, but as the hearings continued reasons began to develop why the areas must have a voice in establishing the standards of pollution control applicable to them. We found that each local area has

its peculiar problems. In some places it was acids in the water from the mines, in other places it was wastes from the steel mills; and in still other areas it was refuse from the pulp and paper industry. In the Southwest, the problem was salinity and pollution from the natural salt content of the soil.

I can assure my colleagues that we did not shirk our duty of putting offenders on the spot and that at least to some degree we were able to dispel complacency and apathy. But I can also report that we found many occasions to commend and congratulate those who had already achieved some measure of accomplishment in solving their own local problems of water pollution. Indeed, if anything, the subcommittee came away from its hearings with the impression that much more was being done in this area than we had previously imagined.

In the third place, we were able to identify the multiplicity of Federal agencies that have been involved in protecting and securing pure water. We established the contributions to pollution control and abatement made by such agencies as the U.S. Geological Survey, the Department of Agriculture in its Soil Conservation Service studies and its studies of the effects of water on farming and irrigation, the Bureau of Fisheries, the Bureau of Mines, the Corps of Engineers, and the Public Health Service.

Finally, we like to think that through these hearings the subcommittee and its able chairman were enabled to promote a number of concrete accomplishments in reducing the impact of water pollution. There were no miracles performed, but some important first steps were taken. I should like to list just a few of them for the benefit of my colleagues:

First. An Executive order was issued giving the U.S. Geological Survey primary responsibility for establishing and maintaining a national network to measure quantity and quality of our waterways.

Second. Federal agencies and ship-

builders are finally developing requirements for treating sewage of ships, including those owned by the U.S. Government.

Third. Interagency conflict has been reduced among some of the Federal agencies working on the problem of water pollution.

Fourth. The results of research done by Federal agencies will now be more generally available to those who might have a need for them.

Fifth. It is likely that in the future Federal agencies and Federal installations will make more adequate provisions for waste treatment facilities. In particular, military installations have been made to realize that they will not be exempt from, but must comply with, the program of pollution abatement.

Sixth. The Bureau of Mines is really going to get to work on the problem of acid mine drainage, instead of just talking about it.

Mr. Chairman, I would like to make some brief comments on the two sections of S. 4 which relate to establishment of water pollution standards and to administration of Federal water pollution controls. Both provisions have a history of extended public controversy; and in both instances the Committee on Public Works has made marked improvement over the version of S. 4 as passed by the other body. We can only hope that the views of the House will prevail when the conferees meet to resolve differences between the two bills.

For my part, I was delighted to learn that the committee had stricken from the bill coming over from the other body the authority granted Federal agencies to set Federal standards for water quality. The hearings in which I participated provided ample evidence that the primary responsibility for abatement of water pollution must reside in the areas affected, if all relevant factors are to be given their proper weight. Our Public Works Committee did a real service to the people of this country by substituting for a mandatory water standard

the provision that individual States must within 90 days file a letter of intent that they will establish not later than June 30, 1967, water quality criteria, if they are to be eligible for Federal grants under provisions of this act. This provision leaves primary responsibility for water quality standards to the States, yet because the act will again be reviewed by the Congress when it expires in 1967, they are given strong incentive to put their own houses in order with dispatch.

Let me say I was a little disappointed to learn of the creation of a separate Federal Water Pollution Control Administration within HEW, because I came away from these 2 years of hearings with the distinct impression that the U.S. Public Health Service had been doing a commendable job. However it is not always possible to have everything one would prefer in a bill, and some clauses are included which limit the potential dangers from such a change in administrative structure.

It is noteworthy that only those functions of the Surgeon General relating to the water pollution control program will be transferred to this new Administration. As was pointed out in debate a few moments ago, even with the changes, the Surgeon General must be consulted by the head of the new Federal Water Pollution Control Administration in all cases of pollution involving public health.

In addition, I am delighted to know that the bill was drawn in such a way that several hundreds commissioned officers now under the jurisdiction of the Surgeon General will be eligible for transfer to the new Pollution Control Administration.

Mr. Chairman, it is a happy occasion for all of us who served on the Natural Resources Subcommittee with the distinguished gentleman from Alabama to see this day arrive when we can join in support of the Water Quality Act of 1965. It makes one proud to think he may have had just a small part in this ever-continuing fight to prevent, control,

and abate water pollution and to take this next step in amending the water pollution control statutes of 1948, 1956, and 1961. It is a great day in this House to see some action taken to provide adequate amounts of pure, potable water

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which is so essential to life's processes. Fresh water is America's most precious natural resource.

Mr. BLATNIK Mr. Chairman, I yield such time as he may consume to the gentleman from Illinois [Mr. GRAY].

Mr. GRAY. Mr. Chairman, S. 4 which has been reported unanimously by the Committee on Public Works, is good legislation.

I have a deep and abiding interest in the subject of water pollution and, as a member of the committee, have followed with a great deal of interest the public hearings on this bill and related bills. I think this legislation, which is being considered today, is another giant step forward in our efforts to solve this problem of water pollution.

It brings about a number of major and necessary changes in our approach to the overall problem of control of waters and the development of pure waters.

First It upgrades the administration of the water pollution control program within the Department of Health, Education, and Welfare. This is a needed and necessary step. It places the program as it should be in a separate status so that full time can be given to it by experienced members of that great agency.

Second. The program for the first time is a beginning in solving the problem of storm interceptor sewers. It provides for \$20 million for 4 fiscal years for research work in this most important field. As a result of this research I hope, and the committee hopes, that a program will begin to fully and completely place the storm interceptor sewers on their way to completion.

Thurd. For the first time by providing an additional \$50 million distributed on the basis of population in addition to the

regular authorizations and providing for the fact that if they wish they may participate in this phase of the program. It brings into being a concept which we have long sought—a local-State-Federal relationship to control this great national problem and finally, the bill provides for a requirement that the States by June 30, 1967, submit to the Secretary of Health, Education, and Welfare water quality criteria for the several States. With this information at hand both the Secretary of Health, Education, and Welfare and the Congress will have the opening steps, if needed, to still further classify some form of standards for all our streams in the years to come.

I am proud to have been associated with the formulation of this legislation.

In closing, I want to commend the father of the Water Pollution Control Act, the chairman of our Subcommittee on Rivers and Harbors, my good friend and highly able colleague, Mr. BLATNIK, of Minnesota. I also want to commend our able colleague from Alabama, Mr. JONES, chairman of the Subcommittee on Flood Control, who has worked diligently for this bill as well as other important public works programs and I certainly want to commend our distinguished and able chairman of our full Committee on Public Works, Mr. FALLON, of Maryland, for his valuable assistance in connection with this important bill.

I strongly recommend its passage.

Mr. BLATNIK. Mr. Chairman, I yield such time as he may consume to the gentleman from Montana [Mr. OLSEN], a member of the committee.

Mr. OLSEN of Montana. Mr. Chairman, I wish to compliment the author of this legislation, the gentleman from Minnesota [Mr. BLATNIK], for his leadership of our committee in bringing this legislation to the floor. I agree wholeheartedly and support most wholeheartedly the efforts of the gentleman from Minnesota [Mr. BLATNIK], the gentleman from Alabama [Mr. JONES], and the leadership of the committee.

Probably the most important problem in respect to water and water control in America today is the problem of securing good water. Thus, most strongly I support this legislation.

Our greatest single natural resource is "good water." On a Federal level we commenced nearly 9 years ago to face the issue of pure water. We came to realize then and more certainly we realize now that the issue of pure water must be settled soon for the benefit of this generation and certainly for the benefit of generations to come. There is a paramount need for good quality water for all the Nation's uses—public and private, human consumption and industrial use.

With the enactment of the Federal Water Pollution Control Act Amendments of 1961 the program was strengthened in several important ways. Appropriations for waste treatment works construction grants were increased. Research function was strengthened. Appropriations for State program grants were increased. Then the administration for the program was vested in the Secretary of Health, Education, and Welfare, rather than the Surgeon General of the Public Health Service, and the enforcement authority was extended to navigable as well as interstate waters.

The impact of the Federal program has been impressive. But it has not been enough. It has taken us not less than 9 years from a situation in which untrammelled pollution threatened to foul the Nation's water beyond hope of restoration to a point where we are holding our own.

However, accelerating population and economic growth are imposing ever-increasing demands upon our available water supplies. Therefore, in this act we increase the available funds for each and every phase of the program. And this time we issue a warning and an encouragement to the States. For, 2 years hence, we are demanding that the States pledge that they shall establish State classifications of water. Failing this



pledge, they shall receive no assistance. If the efforts of the States are found insufficient upon review, 2 years hence, then it will be our purpose to discuss the establishment of Federal standards on all navigable waters and upon all waters which are found to contribute to the pollution of navigable waters.

In my State of Montana I think we can meet the challenge. I think that our State can establish genuinely pure water standards so that water flowing from our State will be pure water. I sincerely hope that the other States to whom we contribute such an abundance of water will as well meet this challenge.

I think that States and communities and individuals should join in this great crusade to purify and then to preserve pure water.

Mr. BLATNIK. I thank the gentleman from Montana.

Mr. Chairman, I yield 3 minutes to the gentleman from California, the distinguished dean, the chairman of the great Committee on Science and Astronautics [Mr. MILLER].

Mr. MILLER. Mr. Chairman, I want to congratulate the Committee on Public Works for bringing out this legislation. I want to congratulate Mr. BLATNIK, the gentleman from Minnesota, for the long fight that he has made in the field of obtaining pure water and the elimination of water pollution. Likewise I wish to congratulate Congressman JONES, who is not here today, unfortunately, but who has done an outstanding job in this field.

Mr. Chairman, I have some knowledge of water pollution and the meaning of water, especially pure water, in this country, because before I came to Congress I was executive officer of the California division of fish and game for 4 years. One of the duties of that commission is the enforcement of water pollution control in our State. We can see and sometimes we can smell the pollution that goes into our rivers, but how about the underground waters of the United States and their pollution?

These are just as important as the waters that flow in our rivers. The continuous use of pesticides, of chemical fertilizers, which are taken underground into our waters, is something which is not only polluting these underground waters but is also polluting the land itself. In going into this field we have to be very careful that we do not treat the symptoms for the disease. There has never been a time when it has been more necessary to get on with this job, but this is a multidisciplinary scientific problem as well as a practical problem. It is a problem which requires the full cooperation of engineers and scientists throughout the country. It is a bigger job than we seek to do through this legislation, which, as important as it is, is only one facet of the problem of water pollution, which is becoming a very popular thing, too. Nevertheless, the real solution for this problem is one which we have not yet found and which will not be found until we apply the same intensive study to the matter of preserving the waters of this country as we apply to developing atomic energy or to the exploration of space. It is going to take almost the same type of effort to accomplish our goal in this field.

The record of the testimony before the Committee on Public Works on water pollution legislation reveals a curious alignment between State agencies and industry in opposing the significant water quality standards provision. Creative opposition, of course, is always beneficial and heartily welcomed. It is difficult, however, if not impossible to discern any creative opposition in these statements.

The formulation of effective Federal water pollution control legislation has

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been beset by this kind of irrational opposition from agencies fearful of loss of authority and from powerful self-interest groups. These same State agencies loudly denounced proposals for Federal financial assistance to their municipali-

ties for waste treatment works construction when these were first made. We have only to look at the record of impartial and highly successful administration of this particular Federal Water Pollution Control Act program to measure how far wrong the initial opposition was. The strongest proponents now for extending and further liberalizing this program, as proposed in the pending legislation, are the State agencies.

Federal authority to enforce the abatement of pollution was just as vehemently opposed. Yet the States themselves sought and received Federal enforcement assistance in abating 13 pollution situations which were insufficiently responsive to their own efforts.

Let us examine the proposed Federal standards authority. It can easily be seen that this is not a grant of exclusive Federal jurisdiction to the detriment and weakening of State rights. The provision requires consultation with the State and local interests right from the start in the preparation of the standards before they are ever formally promulgated. Here again the Federal standards may not be imposed without affording the States a reasonable time for establishing consistent standards under their own authority. Administrative procedural safeguards are incorporated to give the utmost protection against arbitrary decision or action. We can only conclude that the State agencies resent being placed in a bad light for having abdicated their responsibilities. There is nothing to be gained in acceding to their assertions of State authority and willingness to discharge their obligations whether a period of 2 years, 5 years, or even 10 years is fixed for them to take action. They have not done the job and it is well nigh certain that they will not do the job except in conjunction with cooperative Federal authority and assistance.

The basis for industry's opposition to Federal standards authority can be readily understood if not appreciated. Responsible Federal action is much more inclined to further the ultimate public

interest as against a short-term economic benefit. The polluted condition of the Nation's waters dictates that this kind of responsible action be taken now.

There is little merit to arguments against Federal standards which contend that the necessary knowledge and technical information requisite to the setting of standards is not yet available. It would appear that we should wait until the cause of death is determined by a post-mortem examination before we act to apply any kind of preventive medicine. And preventive medicine is exactly the appropriately correct term for standards of water quality. Establishment of already-developed standards on our interstate waters and strong enforcement of the standards once they are established is the soundest approach for preventing pollution from arising in those few streams that have not yet been dirtied. The standards will also demonstrate to municipalities and industries the potential for improving the quality of waters now despoiled by setting reasonable guidelines for effective waste disposal practices. This does not imply that standards are, in effect, a license to pollute. Conservation spokesmen, who have in fact experienced this in certain areas, are to be commended for their forthright demands that this not be allowed to happen. The Congress, of course, can make certain that it does not by carefully watching the administration of this authority if it is provided as it should be.

The strong endorsement and support of the President in behalf of this provision is expressed in his message on natural beauty. As indicated in my previous remarks, there is a total lack of convincing reasons why the Congress should not grant the requested authority. There is every reason, however, as only a look at the Potomac which flows past the Nation's capital will confirm, why the Congress should and must provide the Federal standard-setting authority so that pollution of the Nation's valuable water supplies may be

effectively prevented.

Mr. BLATNIK. Mr. Chairman, I ask unanimous consent that the gentleman from New Jersey [Mr. RODINO] may extend his remarks at this point in the RECORD.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

Mr. RODINO. Mr. Chairman, I am very happy today to have the opportunity to speak in support of S. 4, to amend the Federal Water Pollution Control Act.

For a long time I have advocated new legislation to control and correct the pollution of our water supplies. And as a member of the NATO Parliamentarians' Conference Scientific and Technical Committee I have been active in promoting studies of environmental health problems, such as air and water pollution. It is for these reasons that I introduced, on January 4, 1965, my own bill, H.R. 151, and that I am proud today to express my strong support for the administration's bill, S. 4.

We can sum up what is happening to the streams throughout our country in just two words: America's shame. Water pollution in the United States has become a menace to our health and an economic problem which robs us of the water we need. It destroys fish and wildlife, threatens outdoor recreation areas, and is often an esthetic horror.

We are daily pouring filth into our lakes, oceans, and rivers from the Snake and Columbia in the Northwest, to the Mississippi and Ohio in the Midwest, to the Passaic and Raritan in the Northeast. In addition to ordinary sewage, outfalls are discharging slaughterhouse byproducts, lethal chemicals, and radioactive matter in our waterways. Polio, infectious hepatitis, and more than 30 other live viruses carried by sewage effluent have been isolated by Public Health Service officials. These germs have even been found in sewage that has already been treated.

It should be of concern to all of us to realize that, because of the necessity of reusing water, there is an almost 50-50 chance that the water we drink has passed through someone else's plumbing or an industrial plant sewer.

The adverse effects of water pollution are much broader than health. Some industrial plants reject water as unfit for their uses. Swimming is forbidden on many beaches. Radioactive wastes are found in drainage basins. Floating garbage and other filth clog water supply intakes of some cities that take their water from open streams. Detergent foam runs from the faucets in several States. Mine acids pollute streams and kill wildlife. Oil spills kill birds and spoil beaches.

The first Federal Water Pollution Control Act, passed in 1948, authorized cooperative studies of the problem. The 1956 amendments authorized Federal grants for a small portion of the costs of sewage treatment plants. This program was strengthened and enlarged in 1961, but it is still not enough. We need to take a more positive approach to the whole problem along the lines of the provisions of S. 4, and we need to do this immediately. The longer we wait, the greater the dangers and the larger the problem.

Our greatest need is for a new national policy for the prevention of water pollution as well as abatement of pollution already created. The passage of S. 4 will enable us to establish such a policy through the efforts of a Federal Water Pollution Control Administration directly responsible to the Assistant Secretary of Health, Education, and Welfare charged with supervision of all water pollution control functions. It will also provide more money for research, development and construction of municipal sewage treatment works.

The pollution of our waters is the worst in our history, most experts agree. And our future water needs are staggering. We are already using more than 300 billion gallons of water a day,

and by 1980 we will be using 600 billion gallons each day. By the year 2000, a trillion gallons. It is clear that we are going to have to reuse our water time and time again.

Water pollution is not an insurmountable problem, but it must be worked on immediately. We must invest more money in city and industrial water treatment plants and provide more research facilities for the development of efficient techniques of waste treatment.

The bill now under consideration is a step toward the achievement of the cleaner water supply needed to promote good health and to serve vital functions in the areas of industry, agriculture and recreation.

President Johnson has said that:

A prime national goal must be an environment that is pleasing to the senses and healthy to live in.

Passage of S. 4 is certainly crucial to achievement of this objective, and I urge its prompt and unanimous approval.

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Mr. BLATNIK. Mr. Chairman, I ask unanimous consent that the gentleman from Wisconsin [Mr. STALBAUM] may extend his remarks at this point in the RECORD.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

Mr. STALBAUM. Mr. Chairman, the poisoning of America's waterways is a growing scandal. This pollution of our great natural resources is reaching the point where it is getting late.

An overwhelming mail response to a recent newsletter describing the urgent need for the preservation and restoration of this Nation's resources seems timely proof that our citizens are finally becoming alarmed over these shocking developments. My esteemed Wisconsin colleague, Senator GAYLORD NELSON, joined me in pointing out the steadily worsening problem of pollution of our waterways.

The bill before us today to strengthen the Federal water pollution control program is most necessary in the current battle for conservation; the grim picture of the destruction of this great natural resource is all the more reason to do something now.

We must take action immediately or the green velvet countryside and glittering blue lakes will become so devastated as to deprive our children and succeeding generations of a land of beauty. Continuation of this critical poisoning of our waters will do untold damage, too, to the utilitarian aspects of this resource.

The lakes and streams of our country not only serve people as a source of water supply but provides everyone with ideal recreation and sport, and remain as a big part of this Nation's economy. I feel a great urgency in requesting our consideration and action in moving to stop pollution and provide protection for our country's waters.

Mr. BLATNIK. Mr. Chairman, I yield 2 minutes to the gentleman from West Virginia [Mr. KEE].

Mr. KEE. Mr. Chairman, I rise at this time to pay tribute to the bipartisan leadership of the House Committee on Public Works for their dedicated work, which is based on experience, in drafting and bringing to the floor of the House this afternoon the Water Quality Act of 1965.

Water, clean water, is the most important domestic problem facing the American people today. This bill which we are now considering, as written, is one of the finest and most important pieces of legislation ever presented before the House of Representatives. Therefore, in conclusion, Mr. Chairman, I strongly recommend and urge Members of the House to see to it that this bill may unanimously pass without amendment. America needs this legislation. America needs clean water.

Thank you very much.

Mr. CRAMER. Mr. Chairman, I yield such time as he may consume to the gentleman from Kansas [Mr. MIZE].

Mr. MIZE. Mr. Chairman, this is an excellent program. I live on the Missouri River. We call it the Big Muddy. I am happy to support this excellent program.

I want to remind Members of the House that we are being asked to spend \$150 million in connection with cleaning up our rivers, and yet, before long, we are going to be asked to sustain a cut of \$120 million in the agricultural conservation practices program. I hope we will all be consistent and restore that cut because permanent agricultural conservation practices contribute to the cleanliness of our streams and rivers.

Mr. CRAMER. Mr. Chairman, I yield such time as he may consume to the gentleman from California [Mr. BALDWIN].

Mr. BALDWIN. Mr. Chairman, I rise in support of the bill S. 4. It was my privilege to support the original Water Pollution Control Act when it was passed through our committee and by the House in 1956. It was also my privilege to support the extension of the act in 1961. This is a further step toward the basic objective of cleaning up undue pollution in the streams of America. This is one field that the people of the United States fully understand. I do not think there is a person in this country who has any doubt whatsoever that there is a need to do something to control stream pollution, because every person can see with his own eyes the adverse results of pollution in streams throughout the Nation.

We have tremendous public support for legislation along these lines. I am very pleased to have been a member of the committee in their deliberations on this bill. It has my full support and I hope it will have the unanimous support of the House of Representatives today.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. BALDWIN. I yield to the gentleman.

Mr. BLATNIK. Mr. Chairman, I appreciate the gentleman's remarks. I

should like to express for myself and for the gentleman's many, many friends on this side of the aisle our great delight in welcoming back this modest, dedicated and devoted Member of the House. He has been through an ordeal far beyond normal. Again, we welcome him with great enthusiasm and delight.

Mr. BALDWIN. Mr. Chairman, I thank the gentleman.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. BALDWIN. I yield to the gentleman from Florida.

Mr. CRAMER. Mr. Chairman, I should like to join in the comments made by the gentleman from Minnesota [Mr. BLATNIK]. There is probably no more dedicated member of the Committee on Public Works, no one more capable member, than the gentleman from California. We are certainly delighted to have Mr. BALDWIN back doing his customary sterling job.

Mr. BALDWIN. I thank the gentleman.

Mr. CRAMER. Mr. Chairman, I yield such time as he may require to the gentleman from California [Mr. DON H. CLAUSEN].

Mr. DON H. CLAUSEN. Mr. Chairman, I rise in support of this legislation. I am pleased to follow the very able and distinguished gentleman from California [Mr. BALDWIN] who has certainly provided the committee with great leadership. I join the gentleman from Minnesota [Mr. BLATNIK] and the gentleman from Florida [Mr. CRAMER], in their expressions of pleasure at having him back with our committee. We need his wise counsel and advice on many of these matters. He is certainly one of the finest Members of the House, and I have been pleased to be able to serve with him on this committee.

I was especially pleased with the deliberations on this bill, on this very important matter of improving the quality of water in the streams throughout America, the discussion was fully bipartisan. All of the comments relating to

the exceptional cooperation of this committee that have been made here today are true and are certainly to the credit of the committee.

As was previously mentioned, during the committee hearings, there was never an ounce of doubt in the minds of the participating members that we were purely objective. There was no partisanship. I think the fact that the bill has come out of the committee with unanimous support is evidence of that point.

We must certainly move to improve the quality of water in all of the States. And, of course, as the gentleman from Minnesota [Mr. BLATNIK] said, we have used the carrot as well as a prod to the States and local government primarily responsible for water pollution control programs.

I would like to refer to this frankly as the motivated voluntary effort. However, I would want to admonish the States themselves that if they do not want Federal controls or Federal standards that certainly they are going to have to take the lead themselves, working in unison with all local units of government, to resolve some of these problems.

Mr. Chairman, this has been the great problem of America, the lack of leadership, the lack of ability sometimes to move forward and resolve problems in the environment where they exist.

Mr. Chairman, this bill is designed to provide the additional authorization and in 1967 we will again review this important subject. I would hope that we can see progress that follows the intent and objectives of the committee itself, as we have worked diligently and with dispatch to further the improvement of water quality throughout America.

I urgently request all Members to support this legislation and make this a historic day in the orderly development of adequate conservation measures.

Mr. CRAMER. Mr. Chairman, I yield 15 minutes to the gentleman from Ohio [Mr. HARSHA].

Mr. HARSHA. Mr. Chairman, water is one of the most important of our natural resources, and the entire fabric of our society is dependent on it. The wise and proper use of this great asset is essential to the growth and welfare of this Nation's fish and wildlife, our commu-

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nities, our industries, our agriculture, and the very well-being of man himself.

Because the social and economic development of this country is so entwined around an adequate supply of clean water, the pollution of this Nation's streams, lakes, and waterways is one of the gravest domestic problems confronting us today.

Admittedly, significant progress has been made in combating pollution in the last few years, but a great deal remains to be done. We are far from having conquered the problem. Actually we have only begun—the war on pollution. The struggle to preserve and restore the waters of the Nation is a struggle which will not be won within the next few years or even within the next few decades. It is a struggle which will require the combined effort of Federal, State, and local governments. S. 4 as reported by the House Public Works Committee provides us with some of the tools to wage this war on pollution. For the first time in the history of Federal water pollution control legislation in this Nation, the bill before us today, S. 4, as reported, takes a step toward a cooperative effort among the three levels of government to share in the costs of construction of sewage treatment works. It has become obvious that a solution to the water pollution problem can be found only through the concerted action of all levels of government.

Despite the conviction of the minority on the Committee on Public Works that action to solve our water pollution problems was and still is urgently needed, it was our belief that many of the bills before our committee this session on the

subject of water pollution control, contained unwise, undesirable, and unacceptable provisions.

After public hearings were held on these bills, lengthy deliberations of the committee were conducted in a bipartisan atmosphere. As a result of these deliberations, the committee has reported an amended bill which we do support. Even though it still contains sections about which we have reservations, such as the establishment of an additional Assistant Secretary of Health, Education, and Welfare, and the establishment of a separate Federal Water Pollution Control Administration within the Department, we feel the bill makes a great contribution to the struggle to combat pollution.

S. 4, as reported, is an acceptable and workable bill, and it is my hope that there will not be any attempt to amend the bill on the floor today to reincorporate those unwise, undesirable, and unacceptable provisions which the committee struck out.

I refer specifically to that section in S. 4, as passed by the other body, which would have given the Secretary of HEW the authority to promulgate regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof. These standards would have been promulgated and would have been mandatory if, within a reasonable time after being requested by the Secretary to do so, the appropriate States and interstate agencies had not developed standards found by the Secretary to be consistent with the stated purpose of the bill.

We, and evidently a considerable number of the majority on the committee, are strongly opposed to such a provision. Standards of water quality may be badly needed, but they should be established by the State and local agencies which are most familiar with the matter in a given locality, such as the economic impact of establishing and enforcing stringent standards of water quality.

The water pollution control program

has traditionally been one of Federal-State cooperation, and while there can be no question of wishing to have the highest possible standards, I believe that the authority authorized by the other body would be contrary to the Federal-State cooperative relationship which has heretofore existed, and in fact do violence to that relationship and cooperation. Maximum progress in this field will only be achieved through cooperation between State and Federal agencies and to endanger this cooperation would be to hinder the objective of maximum progress. Authorizing the Secretary of HEW to promulgate and enforce such standards to the exclusion of the States would obviously discourage the States and local agencies from developing their own plans and standards for water quality and purity. It would give a single Federal official the power to control the economic, recreational, industrial, agricultural, and municipal uses of all interstate waters and subsequently lands adjacent to those waters in all parts of the Nation. A Federal bureaucracy would actually have the control of economic life or death over any given area within this Nation. It does not take a very vivid imagination to realize the ramifications of vesting such authority in the Federal Government. Such power over local affairs has never been vested in a Federal official, and we are opposed to doing it now.

After exhaustive consideration of this proposal, the committee approved a substitute provision which requires a letter of intent from the State that it will "establish water quality criteria applicable to interstate waters" by June 30, 1967. This is an acceptable provision and a vast improvement over the Senate version. The existing law declares that it is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States in preventing and controlling water pollution, and this new provision is consistent with that policy.

Mr. Chairman, public health is one of the primary objectives in any pollution

abatement effort and the committee has provided that the Surgeon General must be consulted on the health aspects of water pollution by the new administration. As all of the Members know, the State authorities desire to keep public health in the pollution abatement picture and this should be done—since the necessity for insuring an adequate supply of pure water is based on human needs.

A compromise was made in the amounts of Federal grants for construction of sewage treatment works, as well as in the increased annual appropriation authority. The Republican position for years has been that the States should be encouraged to join in the construction of sewage treatment works, and this is accomplished under section 4, which permits Federal grants above dollar ceiling limitations only when the States match the Federal grants, for such projects.

One other important revision in the law that is authorized by this bill before us today is the subpoena power. At the outset it was suggested that this authority be applied to all phases of the enforcement sections, but realizing that this might lead to unnecessary harassment, the committee wisely limited this power to the public hearing stage with the provision that no trade secrets or secret processes need be divulged.

Mr. Chairman, those are the major revisions. S. 4, as reported, is supported by the minority of the committee, and we hope that this body will have the good judgment to pass this bill in the form it has been submitted by the committee.

Mr. THOMPSON of Louisiana. Mr. Chairman, I yield such time as he may desire to the gentleman from Hawaii [Mr. MATSUNAGA].

Mr. MATSUNAGA. Mr. Chairman, I rise in support of S. 4, the Water Quality Act of 1985.

It is often said that pure water is man's greatest asset. The truth of the statement is self-evident. The important corollary to that statement, one that we too often do not fully appreciate, is that

pure water is water that is free of harmful impurities, in other words, water that is not polluted. And the problem of preventing pollution of water is intricately interwoven with the problem of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste.

These are problems which experience shows that our States, cities, and towns are not able to resolve without Federal assistance. This bill will not only continue to provide that assistance, but it will increase the volume and widen the scope of that assistance.

Noteworthy, for example, are the provisions in the bill which would increase the amount for a single municipal grant from \$600,000 to \$1.2 million and raise the ceiling for multimunicipal sewage treatment works from the present amount of \$2.4 million to \$4.8 million. As our Committee on Public Works has pointed out, this increase is expected to induce communities with larger populations and, therefore, larger costs to undertake construction of needed sewage treatment works.

While providing for the needs of larger communities, the bill also takes into consideration the pressing needs of the smaller communities. This it does by the allotment of the first \$100 million on the basis of the existing formula that takes into account population and per capita income. The smaller communities are also protected by the provision that at least 50 percent of such \$100 million is to be used for grants to projects servicing municipalities of 125,000 population or under.

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In my own State of Hawaii, these provisions which assure aid to smaller communities will provide much needed assistance to our smaller cities and towns in the construction of sewage treatment works.

Mr. Chairman, the need for upgrading our pure water program is imperative, and I urge a vote in favor of this bill.



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Mr. BLATNIK. Mr. Chairman, I yield such time as he may desire to the gentleman from Texas [Mr. PICKLE].

Mr. PICKLE. Mr. Chairman, there is no doubt in my mind that this Nation—and, indeed, the entire world—faces a deathly disastrous water shortage unless immediate steps are taken to plan for future needs.

The time can certainly come when the booming population's growing demands for clean water will greatly exceed the available supply. I say "clean" water, Mr. Chairman, because the vastly abundant supply of available water we have is not all good water. The oceans are the best example of this, as well as the huge underground supplies of brackish, unusable salt water. But more threatening to future generations is the ever-swelling supply of polluted sewage waters and the increasing contamination of our streams and rivers.

As the population explodes, the amount of polluted water becomes greater, while the demand for additional pure water increases. This puts a continual strain on existing supplies and, as time passes, the situation can only become worse.

In my opinion, Mr. Chairman, it is time we in Congress began to think in terms of water quality. And it is time we took effective action now to meet the pressing problems of water pollution.

I am convinced that the measure now before us, S. 4 by Mr. MUSKIE, as amended and submitted to the House by the Honorable JOHN BLATNIK from the Committee on Public Works, should be enacted without delay as an effective means to assure future generations of an adequate and ample supply of clean water.

Mr. BLATNIK. Mr. Chairman, the gentleman from New Jersey [Mr. HOWARD] has already demonstrated his capabilities in representing the citizens of the Third Congressional District of his State. In addition, he has become a valued

member of the Committee on Public Works. I wish at this time to make the remarks which he prepared for presentation during the committee's recent public hearings on S. 4, the Water Quality Act of 1965, a part of the record on this important legislation. Through inadvertence, his statement failed to be included when the hearings went to print. The following remarks were prepared for delivery at 9:30 a.m., Friday, February 19, by Congressman JAMES J. HOWARD, Democrat, Third District of New Jersey, before the House Committee on Public Works at its hearings on water pollution control.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

The remarks referred to are as follows:

Mr. HOWARD. Mr. Chairman, as a new Member of Congress and of the Committee on Public Works, I am honored to have this early opportunity to express my support for H R 3988, the Water Quality Act of 1965. The members of this committee, under the strong leadership of its chairman, have already made great and farsighted contributions to conservation in this country. The Water Quality Act of 1965 will give this Nation new tools with which to conserve that resource which may soon become our most precious—water. In commenting on H R 3988 today, I should like particularly to discuss one aspect of it, the creation of the Federal Water Pollution Control Administration.

The Third Congressional District of New Jersey—Ocean and Monmouth Counties—is a very water-conscious district. The lessons of the need to combat pollution have been learned the hard way by the residents of this area. Raritan Bay, which separates Monmouth County from Staten Island and Long Island, N.Y., may be this country's worst instance of the pollution of salt water.

Recently a Federal study of Raritan Bay pollution, with the help of some economists, has been able to estimate in dollars the damages actually inflicted by the pollution of Raritan Bay. The hard clam industry, once a major source of income in the bay towns, has had to be closed almost entirely, due to the presence of fecal bacteria in the shellfish which caused a serious hepatitis epidemic in 1961. The present value of the remaining shellfish industry is \$40,000 a year; the projected value of the industry if the water were to be cleaned up is \$3 million a year. The fin fish industry is currently worth only \$200,000 a year; it is estimated that figure

could be doubled if the water were clean. Many of the popular bathing beaches have had to be closed. The current yearly income from businesses associated with bathing beaches is \$500,000, economists estimate that with the literally limitless demand for recreational opportunities in the New York metropolitan area, these businesses could be worth \$10 million if the water were clean. The boating industry, including marinas and other docking facilities, is now worth three-fourths of a million dollars a year, it could easily reach \$1½ million.

These figures on the value of fishing and recreation, do not, of course, and cannot include the inestimable value of safety for our people and, particularly their children. Although beaches and shellfish beds are closed, it is well known that children do swim in them and that unscrupulous clambers do take clams from polluted beds, and that the job of patrolling these waters adequately to prevent these dangerous incursions is beyond the power of State authorities.

New Jersey residents have, due to the financial inability to cope with a rapidly expanding population, failed to adequately treat their wastes, both municipal and industrial, before discharging them into public waters. But residents in the Raritan Bay vicinity have been equally, if not more, damaged by discharges of untreated and inadequately treated sewage from New York. Everyday, Manhattan alone discharges over 50 million gallons of raw sewage into New York Harbor, and more than half of the pollution of Raritan Bay comes into the bay from New York Harbor. This amounts to interstate pollution of the worst sort, precisely the interstate pollution that the Federal Water Pollution Control Act of 1956 was designed to correct.

President Johnson, in his message on natural beauty, spoke of the need for a new conservation. The old conservation, of protection and development, will no longer do the job, he said. What is needed now is a firm, regulatory hand. There must be no more procrastinating. Staff of the Department have prepared a priority list of 90 polluted interstate rivers which may require enforcement action; this action must be taken as expeditiously as possible.

For Federal enforcement to be fully effective, there must be continued popular support for the cause of pollution control. The creation of the Federal Water Pollution Control Administration, in addition to freeing the program from some bureaucratic slow-downs, will also serve to make the public more aware of the urgency of ending the pollution of our Nation's water resources. The country's demand for clean water is rapidly approaching the limit of its current supply,

and unless action is taken to reclaim polluted water immediately, the year of 1980 may see our water supply inadequate to meet demands.

The Senate has passed a water pollution control bill, similar to H R 3988, by a non-partisan vote of 68 to 8. I hope that, under the able leadership of the chairman of this committee, the House of Representatives will pass the excellent measure proposed by the chairman quickly and with as great a majority.

Mr. BLATNIK. Mr. Chairman, I yield to the gentleman from New Jersey [Mr. HOWARD] such time as he may desire.

Mr. HOWARD. Mr. Chairman, I am privileged to speak today in support of one of the key pieces of legislation in the Nation's conservation program, the Federal Water Quality Act of 1965. President Johnson's Great Society program is, in a sense, a giant conservation program: a plan for making the most of human, natural, and economic resources. This Congress, in passing the Appalachia bill and other pieces of legislation in the war on poverty, has determined to end the anomaly of a wealthy nation, the wealthiest in human history, permitting a large fraction of its population to be damaged and degraded by poverty. It is equally anomalous for a wealthy nation to permit its natural resources to be damaged and degraded. The amendments to the Water Pollution Control Act of which I am proud to be a cosponsor aim to put an end to the abuse of needed resources. We have become great by using our resources; we must see that we do not now undermine our greatness by destroying them through careless waste and mismanagement.

The legislation we will pass today is designed to attack water pollution from all sides. We will attack it by means of a stronger enforcement program; by increased and better distributed Federal grants for construction of waste treatment facilities; by Federal grants for research and development.

The administrative provision of the bill, which forms the basis for all its other functions, is the creation of a Federal Water Pollution Control Adminis-

tration within the Department of Health, Education, and Welfare. The new Administration will demonstrate the urgency of the need to abate pollution in America and at the same time provide

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the necessary machinery to do it. Today the Federal pollution control program is buried deep within the bureaucracy of the Department—branches within a division within a bureau within an office within an agency. With such an operation it has been difficult to inform the public of how crucial our threatening water shortage may be. It has also been difficult, for a program hindered by the redtape that accrues to a program so low in the chain of authority, to take imaginative, rapid, and forthright action to stop pollution. The new Administration, when supplied as it must and will be with an able Administrator and an expanded and capable staff, must at the very least triple the current pace of pollution abatement.

The bill provides for an important increase in authorization for Federal construction grants. The amount authorized in the new bill, \$150 million a year, could be doubled or tripled and still be well spent. But this 50-percent increase should do much to stimulate construction of waste treatment facilities.

The bill also strengthens the enforcement arm of the program by providing subpoena power to the Secretary in connection with the hearings that may be called if there is no compliance with conference recommendations. This power will enable the Administration to obtain, for example, data on industrial waste discharges, when such data is not forthcoming in the normally cooperative way.

The bill recognizes the growing contribution of storm-caused overflow of sewage and municipal wastes to polluting our streams. Grants for research and development work on this problem are provided with a total authorization of \$20 million a year.

Finally, the bill recognizes particularly

the damage inflicted by water pollution on the country's shellfish industry. I should like to expand somewhat on this point, for it is worthy of particular attention. Shellfish, particularly clams and oysters, are adversely affected by many pollutants. Research done by the Department of Health, Education, and Welfare is beginning to demonstrate that papermill wastes are toxic to oysters. It has long been known that both clams and oysters are sensitive to bacterial contamination, and that shellfish from polluted waters can cause serious illness, including hepatitis, in man. As a result of pollution, many beds that were once leading producers of shellfish have had to be closed by State and local authorities. Even more worrisome is the fact that the patrolling of closed beds is usually not adequate, and in many North Atlantic bays the poaching of shellfish from polluted beds and marketing them illicitly is a lucrative business. I am sure that my colleagues are aware of the several disastrous instances in which severe hepatitis epidemics have been caused by shellfish.

There are several factors that make pollution a particular hardship for shellfishermen. Stationed at the mouths and estuaries of rivers, they must watch angrily as year by year their upstream neighbors make of their river a dirtier and dirtier stream. Not a particularly powerful political force, shellfishermen have had little success in pleading their cause to State legislatures. Furthermore, Federal law itself discriminates against them: the Public Health Service is required to prohibit the movement of shellfish taken from polluted beds in interstate commerce, thus confiscating the product of the fisherman for no fault of his own. Yet no Government agency, as of today, is required to act to abate the pollution that ruined the fisherman's crop.

The shellfish provision in this bill will attempt to protect the economic interests of the shellfish industry, as well as the safety interests of the general public, by

making "substantial economic injury from the inability to market shellfish or shellfish products" grounds for a water pollution control enforcement action. An additional tool in this many pronged attack on water pollution, the shellfish provision should correct a particular injustice that has been done to a small but priceless industry.

I would point out that my own district of Monmouth and Ocean Counties in the Third District of New Jersey lies along the Atlantic Ocean between the Raritan Bay on the north and extending below Barnegat Bay to the inlets south of Long Beach Island.

In my district the hard clam industry, once a major source of income in the bay towns, has had to be closed almost entirely, due to the presence of fecal bacteria in the shellfish which caused a serious hepatitis epidemic in 1961. The present value of the remaining shellfish industry is \$40,000 a year; the projected value of the industry if the water is clean will rise to some \$3 million a year. The fin fish industry is currently worth only \$200,000 a year and it is estimated that this figure will be doubled if the water is cleaned.

The Federal Water Quality Act of 1955 is indeed a conservation milestone for which a major share of the credit must go to JOHN BLATNIK, Congressman from Minnesota. Author of the 1956 Federal Water Pollution Control Act, this ardent lover of Minnesota's beautiful waters has not rested since that time. He has ceaselessly inquired into the operations of the water pollution control program, concerning himself with the smallest details and the largest policies. As a result of his efforts, we now have a bill carefully and expertly tailored to fit the task. I am confident that the House will endorse it overwhelmingly.

Mr. THOMPSON of Louisiana. Mr. Chairman, will the gentleman yield?

Mr. HOWARD. I am happy to yield to the gentleman.

Mr. THOMPSON of Louisiana. Mr. Chairman, I would like to associate my-

self with the remarks of the gentleman in regard to shellfish and other foods of the ocean. Coming from a coastal State which is one of the great producers of oysters and shrimp and other seafood, we have had problems of pollution over the years. We have cleared up some of these problems through our own State initiative, but it also goes to show that the States that are desirous of solving their own problems and cleaning up this water pollution need the helping hand of big brother, that is the Federal Government.

Mr. HOWARD. I thank the gentleman from Louisiana and I imagine the gentleman agrees that it is difficult for the poor shellfishermen to stand idly by while upstream pollutants, possibly from other States, pollute the water in his area and he is helpless to do anything about it.

Mr. CRAMER. Mr. Chairman, I yield 5 minutes to the gentleman from New Hampshire [Mr. CLEVELAND].

Mr. CLEVELAND. Mr. Chairman, before making my formal remarks in support of this legislation, I have a question I would like to ask the distinguished chairman of this subcommittee that considered this legislation, the gentleman from Minnesota [Mr. BLATNIK]. This has reference to subsection (h) of section 4, which is found on page 24 of the bill S. 4, as reported.

Before asking this question of our distinguished colleague, I would like to commend him as I would like to commend my colleague, the gentleman from Florida, for the bipartisan manner in which this bill was handled in committee. I think it is a stronger bill than it was and a better bill.

My question to Mr. BLATNIK is this: Under the provisions of subsection (h), which adds the new subsection (f) to the basic legislation—I have specific reference to the type of situation which might occur in the northern part of my district, where are located the headwaters of a river—if two or three towns got together and set up a regional plan-

ning agency for sewage control, if this were properly certified by the Governor of the State and otherwise came into conformity with this section, would the community qualify for this extra 10 percent of assistance? I am a little confused by the use of the word "metropolitan." In my district the towns involved are quite rural in nature. That is why I am concerned.

Mr. BLATNIK. Yes. In the opinion of the subcommittee chairman the areas would qualify. The intent was not to place any rigid interpretation on the word "metropolitan" even though the bill later, on page 25, line 7, does state:

For the purposes of this subsection, the term "metropolitan area" means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget—

The key language, I call to the attention of the gentleman, is at the bottom of page 24—

or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used—

And the following is the key language:

or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning)—

It was our purpose to make that flexible. In my opinion the situation the gentleman referred to would be covered, and that area would be eligible.

Mr. CLEVELAND. I thank the distinguished gentleman from Minnesota.

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His words are most reassuring. We should all bear in mind that although many of the water pollution problems faced by the Nation are found in the city areas, by clearing up pollution of headwaters of some of our rivers there will be a great public benefit not only to the cities themselves, for water supply, but also for recreational benefits accruing to many people in the country.

I know the distinguished gentleman from Minnesota is aware of this, but we

must also remember that in the headwaters areas where the pollution occurs the communities generally are smaller and their capacity to construct sewage treatment facilities and to pay the proper share of them is less.

Mr. Chairman, I am pleased to recommend S. 4, as amended, to the House. As a member of the Public Works Committee, I took an active part in the hearings on the bill and in the committee. This measure represents the best bipartisan, constructive effort. Substantial improvements have been made in the bill as it came to us from the Senate.

Our country has made great strides forward in the campaign against water pollution begun when the first national program was established under the Eisenhower administration, nearly 9 years ago. The program was strengthened further by amendments enacted during President Kennedy's first year in office.

As the committee report states:

The impact of the Federal Water Pollution Control Act has been impressive. It has taken us in less than 9 years from a situation in which untrammelled pollution threatened to foul the Nation's waterways beyond hope of restoration, to a point where we are holding our own.

Greater efforts, made possible through these current amendments, however, are needed. It is not enough to hold our own at present levels. The pressures of population growth, the growth of our cities, and the changes in industrial technology make it imperative to step up the program.

It goes without saying that water is one of our most precious resources. Although it exists in tremendous quantity in a variety of ways, the time has past when we can use it carelessly. Through many years of direct experience and legislative work in New Hampshire, I have become intimately familiar with problems of water conservation and pollution in northern New England.

#### EXPERIENCE GUIDED AMENDMENT

It was on the basis of this experience

that I vigorously opposed a provision in S. 4 as it was passed by the Senate that would have authorized the Secretary of Health, Education, and Welfare to prepare regulations setting forth standards of water quality to be applicable to waters covered by the bill. Under this provision, the Federal agency would establish standards that would be mandatory on the States. Happily, this provision has been changed by the committee and the bill now places responsibility for setting standards on the States.

High standards of water quality are essential but they ought to be set by those local agencies that are familiar with the local conditions including economic factors. There are places in New Hampshire, for instance, where a mandatory Federal standard set by a remote official could, conceivably, restore a river to its natural purity but only by ruining paper mills, which are the main or even the sole industry for an entire region. This is a problem that exists in various forms throughout the country. In legislating on the problem, we must take care to provide for a careful balancing of community interests. S. 4, as we have amended it, provides for this in the only practical way it can be done, that is, by working through the State and local governments.

#### FEDERAL ZONING CONTROL OPPOSED

The Senate version of the bill actually would discourage State and local governments from developing their own plans for water quality control. Moreover, it would give the Federal Government effective power to establish zoning measures by which to control the use of land within watershed areas in every part of the country. Such power over local affairs never has been vested in a Federal official and should not be. The drift toward centralization in this Nation is serious enough without accelerating it deliberately and unwisely.

Accordingly, the committee has removed this provision and instead has inserted a requirement for the States to file

letters of intent setting forth their standards of water control. States that do not do so within a specified time limit would not receive any funds under this act.

The bill has been amended further to increase the authorization for grants to States for construction of waste treatment facilities and new incentives for the States to participate in the costs have been written in. The bill does not go as far along this line as I would have liked but it provides an important step forward.

#### CLEVELAND AMENDMENT EXPLAINED

It is a matter of keen regret to me that the Public Works Committee would not accept my proposed amendment to this bill, which would have given an extra boost to hard-pressed communities in disadvantaged and depressed areas. Under the provisions of my proposed amendment, communities in depressed or disadvantaged areas would receive an extra 15-percent contribution from the Federal Government provided they were located in States that matched equally the basic 30-percent Federal contribution. My reasons for proposing this amendment are, of course, clear. When we consider that in Appalachia, communities there may receive up to 80-percent Federal assistance for sewage treatment plants, it seems only fair that, in northern New England, communities should be entitled to at least 45 percent Federal assistance. Many of our headwater communities simply do not have enough taxable property to support large sewage treatment plants, the purpose of which is to ultimately benefit larger and more prosperous communities located down river, and, indeed the entire Nation, by improving our water resources and recreational opportunities.

In this connection, I am proud of the leadership in New Hampshire's General Court that have proposed to increase New Hampshire's share upward from the present level of 30 percent as high as any in the Nation. I applaud their constructive proposal, but, in certain rural areas

of New Hampshire, I think it only fair that the Federal Government should do more.

In conclusion, Mr. Chairman, I repeat my statement, this measure is the product of careful, bipartisan deliberation. I urge its adoption.

Mr. CRAMER. Mr. Chairman, I yield 5 minutes to the gentleman from Illinois [Mr. McCLORY].

Mr. McCLORY. Mr. Chairman, I wish to speak briefly on this bill and to join with others who have commended the chairman and ranking minority member, the gentleman from Florida, as well as all members of the committee, who have considered this subject in great detail and have come forward with the legislation.

I had the privilege of serving with the gentleman from Alabama [Mr. JONES] as the ranking minority member on the Subcommittee on Natural Resources and Power, which, as the gentleman from Missouri [Mr. RANDALL] indicated earlier conducted the most extensive hearings ever conducted by a committee of the House on the subject of water pollution.

I wish to emphasize the fact that there are many competent and experienced local and State water pollution agencies. In addition, there are a great many responsible individuals and groups throughout the States who are working in behalf of cleaner water for our Nation.

I realize that there are differences of opinion as to some details of this bill. I testified on two occasions before the committee, giving my suggestions, not all of which are being followed. Nevertheless, I want to indicate my desire to support this legislation. The differences of opinion which I have are being reconciled in support of this measure which I regard as a forward step in the battle to reduce water pollution.

I would certainly like to join in the comment which was made earlier by the gentleman from California [Mr. MILLER] in suggesting that the pollution of our underground water supply is threatened

also. This is something which should be of great concern to the Federal, State, and local agencies of our country. More and more we are tending to dispose of our waste waters underground by pumping the used water below the surface. In this way we are contaminating, in many instances, the great underground water supplies. Underground water reserves amount to many times the supply of the surface waters, I might say.

I also want to indicate the good cooperation that has developed between the Federal, State, and local agencies in behalf of this subject of water pollution. Great progress has been made in this field. We should not underestimate the progress that has been made by the State and local agencies as well as by many industries and communities under the existing legislation. While this bill

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calls for the establishment of a new administration to be in charge of water pollution, I would certainly not want to suggest that the existing administration has not done an effective job, because, indeed, it has. Many other evidences of progress have been witnessed, including the coordination of data gathering of water quality and the coordination of water research activities. Many of these things have come about not just by legislation or by chance, but by virtue of the fact that we in the Congress and the public generally have focused attention on the need for cleaning up the waters of our Nation. The Congress and the public have promoted the most efficient possible employment of the limited number of expert hydrologists and other scientists whose talents are needed in reducing water pollution.

A continuing problem is that of our Federal installations. Our Subcommittee on Natural Resources and Power issued a report with regard to the problems of the Federal installations. We also produced a significant report with regard to municipal sewage and certain

other subjects. These subjects may require additional legislation which we may have occasion to consider later. With respect to the subjects covered by the bill and with respect to the immediate needs we are considering here, I cannot help but feel that this is a great forward step in our national task of improving the quality of the waters of our Nation.

Mr. BLATNIK. Mr. Chairman, I yield such time as he may require to the gentleman from California [Mr. Moss].

Mr. MOSS. Mr. Chairman, an effective Federal water pollution control program is essential to the preservation and protection of our Nation's waterways. However, no water pollution control program can be truly effective unless water quality standards are a part of that program.

Water quality standards are a recognized tool in pollution abatement programs throughout the country. Not only have official standards of water quality been established by a number of State and local agencies, but standards have been used by the Department of Health, Education, and Welfare in its pollution abatement program.

These standards, however, are not official standards of water quality set by the Department, but rather are those which are established at the conference stage of enforcement actions by the States concerned and the Department of Health, Education, and Welfare. At these conferences the conferees review the sources of effects of interstate pollution, usually agree upon water quality standards, and recommend a program of remedial action which will improve the quality of water to meet the standards they have established. This method has proved effective in a number of instances, such as the Colorado River and its tributaries and certain areas of the Mississippi River, to name but a few.

The most recent enforcement conference held by the Department of Health, Education, and Welfare on March 2-9, 1965, concerning the interstate waters of

the southern end of Lake Michigan and the Calumet River, Ind. and Ill., is again illustrative of the use of water quality standards. At this conference the conferees unanimously agreed to use as a guide for water quality at Chicago waterworks intakes the "Recommended Quality Criteria Goals, Lake Water at Chicago Intakes" presented by the Department of Water and Sewers of the city of Chicago, at the conference. These standards were adopted by the conferees for the purpose of initiating a program of remedial action to protect water quality in the area for the maximum number of legitimate uses.

Although it is apparent that the Department of Health, Education, and Welfare can, and does, use water quality standards in its pollution control program, and these standards are an effective tool in pollution abatement action, I believe that the Federal pollution control program could proceed more rapidly and effectively if water quality standards were established separately, and not as a result of each individual enforcement action.

In most of the 34 enforcement actions taken by the Department of Health, Education, and Welfare since 1957, water quality standards have been established by the conferees, or when necessary, recommended by the Secretary. There are at least 90 more areas where the Department of Health, Education, and Welfare has evidence of interstate pollution. If enforcement action is taken on these polluted streams, and if the Federal and State agencies must wait until each conference is held before establishing water quality standards, it will be many long years before this pollution is abated. However, if the Department of Health, Education, and Welfare in cooperation with the State agencies, can act now to establish water quality standards for interstate streams throughout the country, I believe that the course of remedial action would be clear to all, and pollution abatement could be accomplished more swiftly on the local, State, and Federal



levels.

Certainly water quality standards are an effective tool in pollution abatement programs, but even more important, they can be an effective measure in preventing pollution. Our scientists and engineers have developed almost miraculous techniques for reducing pollutants in waste discharges, but with all their technical knowledge and skill they cannot completely restore a filthy stream to its former freshness and beauty. The Potomac River is a good example of the deleterious effects of pollution on a once beautiful and clean stream. There is now an abatement program in force on the Potomac which will end the pollution of this river. But even with the tremendous efforts being put forth to clean up the Potomac we know that the effects of the many years of pollution will not vanish overnight.

The present approach of the Federal water pollution control program is negative. The Department of Health, Education, and Welfare under provisions of the Federal Water Pollution Control Act can act to abate interstate pollution only after health or welfare is endangered. In other words the Department of Health, Education, and Welfare can act only after serious and sometimes irreversible damages have occurred.

If the Department of Health, Education, and Welfare were able to set water quality standards, the Federal Government and the States could act to prevent the water quality from falling below these standards. Action could be taken before health or welfare was endangered and serious damages occurred. This is a positive, effective, and beneficial approach to preserving our water resources.

If clean water is our goal, it is essential that the Department of Health, Education, and Welfare be empowered to set standards of water quality not only to aid in the abatement of existing pollution, but to aid in the prevention of the further needless destruction of our remaining clean streams.

Mr. BLATNIK. Mr. Chairman, I ask

unanimous consent that the gentleman from New York [Mr. OTTINGER] may extend his remarks at this point in the RECORD.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

Mr. OTTINGER. Mr. Chairman, I rise in support of S. 4, the Water Quality Act of 1965, and I want to congratulate my distinguished colleague, the gentleman from Minnesota [Mr. BLATNIK], for fighting the good fight to end pollution of the Nation's waterways. I only regret that his fight was not a bit more successful.

This bill purports to carry out the request of the President for a concerted attack on water pollution. It is to be a first step on the road to a Great Society in the area of meeting the Nation's pure water needs and ending the poisoning of our lakes, rivers and streams.

I hail the direction. But this bill is only a faltering, baby step in the right direction.

This bill does not begin to provide the funds necessary to do, or even stimulate State and local governments to do the job. It adds \$50 million a year to the \$100 million already authorized, and I am certainly grateful for that.

However, one sewage treatment plant for New York City alone cost \$86 million. The State of New York has two-thirds of its population living in areas affected by polluted waters. It has 1,167 communities that are pouring either inadequately treated wastes or raw sewage into rivers, lakes and streams. I am sure that the problem in other States is of comparable proportions. The funds authorized by S. 4 will cure but a drop in the oceans of polluted water flowing through this land.

I testified before the Committee on Public Works to request additional funds to attack the pollution problem and I firmly believe that an effort of great magnitude will be required to resolve

the problem.

Mr. Chairman, I and 10 of my colleagues have introduced legislation to

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establish a Hudson Highlands National Scenic Riverway in New York. One of the prime purposes of this legislation is to make land along the banks of the Hudson River available for recreational purposes—for swimming and boating and the like.

The benefits of this legislation will be beyond realization, however, regardless of what is done to preserve the shoreline, unless something is done to clear up the pollution that makes the river virtually useless for recreation the entire length of the Highlands.

New York City alone pours more than 600 million gallons of raw sewage into the Hudson daily. Since the Hudson is a tidal estuary, this sewage is a major factor in pollution reaching as far north as Poughkeepsie. To clear up this problem alone will require more money for New York City than S. 4 provides for the entire Nation.

The New York metropolitan area has a water shortage crisis this year. People will be prohibited from watering their lawns except for a few hours one day a week. Restrictions will be imposed on car washing and even on bathing. Hydrants will be sealed in New York City so that children will not be able to enjoy their usual summer play.

The most obvious way to meet this shortage would be to use the plentiful waters of the Hudson to supplement the watershed supply. This is feasible since the river is not saline north of Poughkeepsie. But many communities are revulsed at the idea of using Hudson River water for drinking purposes because of the pollution. To gain public acceptance of the idea of using Hudson water, we will have to clean up the river, and the cost will be far in excess of the funds S. 4 authorizes.

New York City newspapers recently carried a story about typhoid cases which

resulted from children drinking Hudson River water. This certainly demonstrates the urgency of attacking the problem forcefully and immediately.

Governor Rockefeller has proposed a \$1.7 billion water pollution control program for New York State. This program makes the Federal proposal we are considering today insignificant by comparison. In testifying before the Public Works Committee I supported Governor Rockefeller's request for an advance commitment formula so that States may plan ahead and commit funds for long-term programs of pollution control and abatement and take their share of Federal funds over a period of years. Such a formula would be a worthwhile addition to this legislation, for the cost of building sewage treatment facilities is ever rising, and it will cost both the States and the Federal Government far less to complete the necessary facilities as soon as possible.

In my view, there is also an urgent need for Federal standards for water pollution control. The State encouragement formula under S. 4 makes a start, but a real problem arises on interstate waterways when one State's inadequate practices nullify another State's worthy efforts. The results are particularly devastating when the lax State happens to lie upstream.

Mr. Chairman, I hope that before too long we will add the teeth necessary to make this legislation truly effective. I hope we will provide funds adequate to make a real dent in the water pollution problem, and I hope we will add Federal standards.

I support S. 4 as a first baby step in the right direction. I hope the baby's growth will be rapid and healthy.

Mr. BLATNIK. Mr. Chairman, the gentleman from Texas [Mr. WRIGHT] has been one of the real sparkplugs in this field. At times when we needed him we called him our running quarterback and at other times we called him our blocking halfback with respect to this water pollution control legislation for

many years.

Mr. Chairman, I yield to the gentleman from Texas [Mr. WRIGHT], such time as he may require.

Mr. WRIGHT. Mr. Chairman, this undoubtedly is one of the most vitally necessary bills which will be presented to Congress this year. It builds upon the highly successful experience of the basic Water Pollution Control Act of 1956 and branches out onto new fronts in our continuing battle to preserve and pass on to the American posterity a heritage of clean water.

Certainly no informed person can deny the importance of the problem or the vital urgency of the need.

Within the past 8 years, through the program begun by this Congress and pioneered primarily by the vision of our colleague, the gentleman from Minnesota, JOHN BLATNIK, we have begun to make a dent in the problem. But there is much remaining to be done. During the past 8 years, 5,994 grants have been made to that many separate and distinct municipalities for the purpose of assisting them in the struggle to abate the pollution of our Nation's streams.

At the cost of approximately \$500 million, we have stimulated local construction in the amount of more than \$3 billion.

It probably is fair to say that we have reached the point where we are on the verge of holding our own against the onrushing tides of pollution. But this is far from adequate. The bill presently before use would expand this activity in several very meaningful ways.

First, let us get a broad general picture of the problem itself. Thousands of local crises are merging rapidly into one national crisis. A general cross-section of the national scene would include the following vignettes:

In a Connecticut public school, a new student tries the drinking fountain and steps back in horror as a milky substance froths up in bubbles from the faucet. A classmate explains that it is a bad time of day to get a drink, since detergents are

working their way back through the city's water system.

Along the flooding Mississippi River this week, untreated sewage is washed up through storm sewers into the streets of several towns.

In the Nation's Capital, a father proudly takes his young daughter for a ride in a swan boat on the beautifully landscaped tidal basin where cherry trees form a delicate pink wreath beneath the Grecian grandeur of the Jefferson Memorial. He looks away in frantic embarrassment, a bit sick to his stomach and suddenly changes the subject when his little girl asks "What are all those odd looking things" on top of the brownish water.

Lake Erie is dying. It has a "dead spot" covering several thousand acres where a cesspool of pollution robs the water of its life-giving oxygen.

Dead fish float up to the banks of Town Creek in a small midwestern community after a local shelling plant dumps its refuse, laden with tannic acid, into the stream.

A dry west Texan town hauls water 50 miles in tank trucks for its citizens to drink while an east Texas town feverishly fights a flood.

In a New York suburb, a salesman of distilled water reports a fantastic boom in the sale of bottled drinking water.

A southern city is turned down by the third industry in a week because it lacks a "dependable" water supply.

International crisis looms as an official Mexican delegation tells the U. S. Congress that our Colorado River irrigation system is dumping crop-destructive salt on the best farming lands in the Mexicali Valley.

All these are but facets of the most rapidly growing domestic headache in the United States—We are running out of usable water. The problem, at first parochial, very rapidly is becoming national in scope.

There are many reasons clean water is becoming increasingly important. The first is that there are more and ever more

people drawing upon the fixed supply. One of the most crucially significant facts of our time may be read in the statistics of population growth—both in the United States and throughout the world.

In the beginning, the world's population grew very slowly. At the start of the Christian era, there were only some 250 million people on the entire earth. It took 1,500 years for that figure to double or reach 500 million. But then a sudden and dramatic upswing began which has continued over the past 400 years to increase by geometric progression. There were 1 billion people in 1835, 2 billion in 1935, 3 billion in 1965. If this pace is maintained, there will be 6 billion—twice as many as we now have—in the year 2000.

Here in America, when we sit down to dinner each evening, there are 7,000 more of us than on the evening before. Every year we add the population equivalent of a new Philadelphia. The same amount of land, air, and water must be made to serve more and ever more people.

More alarming still is the fact that our society each year is using more water per capita. While the whole nation required only 40 billion gallons daily in 1900, we used 360 billion gallons a day last year. If the present trends continue this figure will double by 1980 and triple before the beginning of the 21st century.

Block by block, acre by acre, section by section, new housing projects sprawl

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inexorably outward, denuding the former countryside of its natural cover. Where trees and native plantlife once found ample succor from the rainfall, today neat rows of houses march in line behind their inevitable green carpets.

With typically more leisure time, the suburbanite waters his shrubbery, his flower beds, his lawn. The thirsty lawn grasses which have become a status symbol in American suburbia often soak up water at four and five times the pace required by the native grass and shrub

life.

Washing machines with enamel plated efficiency put the clothes and dishes through several rinsings, extravagantly squandering the water supply and discharging insoluble detergent suds into the disposal lines. Fly by plane over a new top neighborhood in any southwestern city and count the private swimming pools which sparkle in the sun. In one such typical neighborhood, the loss to evaporation is counted in the thousands of gallons daily.

Increasingly in the past few years, pollution has become probably the most critical of our water resource problems. No major section of the country is immune. Streams which once ran clean and sparkling pure have become clogged by organic and industrial wastes which can transmit disease, by toxic detergents and pesticides, by inorganic chemical and mineral substances which result from mining, manufacturing, oil and chemical plant discharges. A prime example is the Potomac on whose banks sits the Capitol of the United States. There also is a relatively new problem arising from radioactive wastes.

When demand exceeds supply, the reuse of water is a necessity. A special U.S. Senate study recently pointed out that the total dependable fresh water supply available to the country by 1980 will be only about 515 billion gallons a day. But our total daily water requirement will have climbed to more than 600 billion gallons. Even with maximum engineering and purification works, the study concludes that the most we can hope to make available is about 650 billion gallons. And by the year 2000, our foreseeable water needs will exceed 1,000 billion gallons a day.

The pollution problem in spite of our best efforts has been growing at least as rapidly and probably more rapidly than our solutions. At the end of 1959, the municipal sewage released into our streams was equal in pollution effect to the untreated sewage from 75 million people, three times the amount in 1900.

The bill before us offers a greatly expanded opportunity to fight pollution effectively. It is a substantial improvement over existing law. It is worth noting that, almost uniquely among major legislative matters this year, it has the unanimous endorsement of the Committee on Public Works, including Members from both sides of the aisle.

This bill is the product of many weeks of public hearings last year as well as 3 weeks of additional hearings this year, plus 3 long arduous days in executive session. Many Members contributed creative thought to shaping its provisions.

Here basically, is what it will do:

First, it will upgrade administrative control through the creation of a Federal Water Pollution Control Administration. This will consolidate numerous scattered activities under one effective head, give the program an identity commensurate with its importance, and facilitate action. Heretofore, this significant activity has been relegated to the status of a division within a bureau within the Public Health Service within the Department of Health, Education, and Welfare.

Second, subpoena power will be given to the Administrator to strengthen his hand in enforcing already existing standards. This can greatly facilitate compliance. This subpoena power is available at the hearing stage.

Thirdly, more money will be made available for the practical battle against pollution. This is considerably more important than the adoption of theoretical standards. Existing pollution cannot be abated simply by court order, since the effluent from treatment plants flows through gravity into rivers. This bill provides \$150 million rather than the existing \$100 million annual authorization. The original Senate bill made no gain in this regard. For a battle of this crucial importance, we feel that \$150 million a year is little enough indeed. It amounts to less than \$1 per year for each citizen to preserve and protect the one

commodity without which no citizen could live.

In the fourth place, realistic help for the big cities is available for the first time in this bill. This is where most of the pollution originates. Ceilings on individual matching grants have made existing law relatively ineffective as a meaningful help to the metropolitan cities. These ceilings are raised in this bill to a workable level. The original Senate bill offered no solution to this very real problem.

Finally, each State is required for the first time to develop a set of water quality and quantity criteria. This is a meaningful advance. It is the first step in making a national water inventory, which we have desperately needed. The States are given 2 years in which to prove that they can and will develop, apply, and enforce water quality criteria.

This bill is crucially important to the future of America. It deserves a truly overwhelming vote from the membership of this House. I hope and trust that we will demonstrate by the number of our votes today the determination of this body to win the continuing battle against pollution of the Nation's streams to the end that future generations may have as their heritage an abundant and usable supply of this most precious and most indispensable of all the earth's resources.

Mr. CRAMER. Mr. Chairman, I yield such time as he may require to the gentleman from Wisconsin [Mr LAIRD].

Mr. LAIRD. Mr. Chairman, it is a great pleasure for me to rise and support this legislation before the House today.

As a Representative of the Seventh Wisconsin District, I have long been aware of various attempts to meet the problems to which this legislation addresses itself. The Seventh Wisconsin District is composed of many papermills, and I am familiar with the good intentions of this industry with regard to water pollution control and abatement. The paper industry in my district is the largest single employer. Employers and employees in our Seventh District sup-

port this bill as amended by the House committee.

The pulp and paper industry has, of course, been specifically involved with the problem of pollution.

They are aware that the problems of control are both intricate and complex. On the one hand, the paper industry must have process water of adequate quality. On the other hand, the industry is aware that the users downstream must have suitable water also.

It is certainly safe to say that while much remains to be done, more than lip-service should be paid to the paper industry efforts in this area.

I would like to pass on one very impressive fact to my colleagues. During the past 20 years the total organic pollution load, as measured by biochemical oxygen demand, has actually been reduced by the paper industry, despite the fact that this major industry's production in tons has more than doubled in the same period.

And there are other noteworthy facts that could be mentioned at this time. A recent survey by the National Council for Stream Improvement indicates that 75 percent of the pulp and paper mills in the United States have waste treatment facilities in operation. This compares with only 37 percent in 1949. Thus it is obvious, Mr. Chairman, that the paper industry has recognized the need for water pollution control and that it has been taking concrete steps to alleviate the problem.

Through discussions with those concerned with various paper mills in my district, I have found that the efforts and achievements of the pulp and paper industry to combat water pollution are on the increase.

The whole problem faced by this legislation is exceedingly complex. The finger cannot be pointed at any one group. For at this critical time industry, government, and all involved groups have a stake in working toward a mutually beneficial solution to the water pollution problem.

I think the impressive story and the attitude of the paper industry is something which needs to be stated today.

This is a story, Mr. Chairman, which relates to the thinking of everyone in these Chambers. While some would contend that additional efforts could have been taken by the paper industry, the fact remains that they have made a significant beginning. I wish, for example, that I could present a similar array of facts for our Government installations. In glancing through the hearings in the House, I discovered a great deal of concern expressed by the members of the committee regarding pollution by Government installations.

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This, however, is not the subject before the House today and will probably be dealt with, I hope, in the future. I stress this only to indicate that in the case of one specific industry—the paper industry—there are significant efforts underway. As a Member of the Congress representing an area which includes many outstanding papermaking facilities, I feel dutybound to spell out their efforts during a consideration of the Water Quality Act of 1965.

In conclusion, I think that the legislation as reported by the House committee emphasizes the continuing need of cooperation by all agencies concerned with the problems of pollution. I am certain, Mr. Chairman, this legislation will definitely enhance the quality and value of our water resources. I envision a future of cooperation and respect between all concerned groups, and particularly because of their past record, the various paper industries of the United States.

Mr. BLATNIK. Mr. Chairman, I yield such time as he may require to a distinguished and important member of our committee, the gentleman from California [Mr. JOHNSON].

Mr. JOHNSON of California. Mr. Chairman, I rise in support of the pending legislation, S. 4. As a member of the Committee on Public Works and a

member of the subcommittee that has dealt with this problem in the legislative session of 1961 and again in 1965 I want to say that all of the people of my State from whom I have heard are very much interested in the passage of this bill. Representing the watershed area in the West that I do I know how important it is to keep our streams clean and clear and free of pollution. We in California have many pollution problems. With the growth that is taking place in our State we are confronted with more of the problem of pollution which is causing concern all the way back to the mountainous areas where the streams arise. It is also a problem in our valleys and in the delta and great San Francisco Bay area. I know that this legislation is going to do a lot to clear up the rivers, lakes and bays of our Nation.

Mr. Chairman, I want to commend the chairman of the subcommittee, the gentleman from Minnesota [Mr. BLATNIK], as well as the minority members who have worked very hard with the majority in perfecting this bill and also, Mr. Chairman, I want to commend the chairman of the full committee, the gentleman from Maryland [Mr. FALLON], for bringing this fine piece of legislation to the floor for final passage.

Mr. BLATNIK. Mr. Chairman, I yield such time as he may consume to the gentleman from Florida [Mr. PEPPER].

Mr. PEPPER. Mr. Chairman, I want to ask the able gentleman from Minnesota and also my distinguished colleague from Florida, the ranking member of the Committee on Public Works [Mr. CRAMER], whether there is any language contained in this bill which would afford any assistance to this sort of a situation which exists in the congressional district which it is my honor to represent.

There are three municipalities which wish to combine to connect with an outfall, that is, a system of emptying impure water into the Atlantic Ocean, way out far enough so that it could not pos-

sibly pollute the beaches of the mainland areas. Under the public works program that sort of an effort cannot obtain assistance because that program is limited to sewage treatment plants.

Now, Mr. Chairman, these people want to accomplish the same purpose, that is to say, safely to dispose of impure water.

I just wanted to know whether or not any assistance might be possible for that sort of program under the provisions of this bill.

Mr. BLATNIK. In response to the gentleman's inquiry, we had been hopeful, at least some of us had the opinion, that perhaps under the research and planning section there was provision for combining storm and sanitary sewer projects, and that would be eligible. However, in further checking on the matter, I am informed that it would not be eligible. Funds with which to provide facilities for the treatment plants themselves certainly are eligible, but I do not believe this would apply to a project such as the outfall extension which the gentleman from Florida has described.

Mr. PEPPER. As the gentleman from Minnesota knows, it was I who advised the gentleman with reference to this matter for I called just a few minutes ago the Department of Health, Education, and Welfare, and one of the representatives there told me that he thought the use of an outfall in the disposal of waste was already well established and the proposal of my constituents, as I reported it to him, might not be eligible on an experimental or research basis. The language, however, of this bill is broad enough to cover the proposal of my constituents if there is anything unique or distinctive about the proposal so that it would contribute something of value in disposing of impure water or sewage.

Mr. BLATNIK. If the gentleman will yield further, I would like to elaborate a little further. The problem of the gentleman from Florida [Mr. PEPPER] is a bona fide problem and one which is

entitled to assistance. We have inland municipalities which need assistance by way of extensions of interceptor sewers in order to reach their treatment plants. There is an awareness of this need among the membership of the Committee on Public Works for a general public assistance program for community facilities. We do intend to hold hearings—at least I shall make every effort to do so—on this matter. It represents an important and justifiable area of exploration and we do hope that that program will be of assistance to the situation which the gentleman from Florida has described.

Mr. PEPPER. May I make some inquiry with respect to the same subject of my able colleague, the gentleman from Florida [Mr. CRAMER], the ranking minority member of the committee?

Mr. CRAMER. If the gentleman will yield, we had a discussion of this, of course, in the Rules Committee and I think it was generally conceded, as the gentleman from Minnesota [Mr. BLATNIK] has conceded, that there is no grant money but that which is limited to suitable disposal treatment plants. The only possibility would be under 6(a) relating to grants for research.

I believe the key phrase there is whether or not this is a new or improved method. On line 16, page 20; and line 18, page 21, there is some reference to the matter, but these grants are limited to new and improved methods. If this is a new and improved method for waste water, then it could be included and that would be a decision for the Secretary to make.

Mr. PEPPER. I thank very much the able gentleman from Minnesota and my able colleague from Florida for those remarks.

Mr. YATES. Mr. Chairman, water pollution is a problem of nationwide dimensions. Unfortunately, not enough of us are aware of its many disastrous consequences for municipal and industrial water supplies, for fish and wildlife, and for recreational areas. That is why

this bill is so important—important to our Nation and especially important to those who live on the Great Lakes. Today I wish to speak particularly as a representative of the people of the 9th District of Illinois, which is located in the city of Chicago.

Chicago's development has been largely determined by its surrounding waters. Early ship traffic did much to make it an economic and communications center, the Nation's second largest haven for immigrants of many nationalities and a pioneering city for inventors, architects, and businessmen of all kinds. Blessed with a great diversity of people and talents, and the space and resources in which to develop those talents, Chicago became the largest city of the Great Lakes.

Our city's focus, its particular charm, its very life, have always been its beautiful lakefront, which has provided a population for more than 5 million people with unparalleled opportunities for development. After some fearful epidemics of cholera and typhoid fever at the end of the last century, the city of Chicago spent a great sum of money and performed extensive research to develop techniques of water treatment to assure a continuing safe water supply. In 1889 the city embarked on one of the engineering wonders of the world: reversal of the flow of the Chicago River. And in 1922 the same was accomplished with the Calumet River, in order to protect the lake.

Chicagoans are not oblivious to Lake Michigan's vulnerability. However, for many years they avoided taking measures sufficient to reduce the threat to the lake.

The Great Lakes comprise the greatest fresh water resources in the world. It is unforgivable that our children should be deprived of the lakes' benefits. Yet that is what is happening.

This was demonstrated most clearly at the conference held under the existing Federal Water Pollution Control

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Act provision at Chicago March 2 through 9 this year. Though I was unable to attend the conference, I followed it closely. At its conclusion, three State and two Federal conferees unanimously concluded that Lake Michigan and its tributaries are polluted, that bacterial counts are too high for safe swimming, that phenols are causing tastes and odors in the drinking water, and that nutrient discharges are accelerating the irreversible aging of the lake.

Damage to Lake Michigan probably represents the most unpardonable encroachment of water pollution in the United States. When our Great Lakes start to deteriorate, river pollution becomes routine. Pollution should never have been allowed to advance this far. At this pace we are losing the battle to pollution. Scientists studying the ecology of large stagnant bodies of water, such as Lake Michigan, are pointing to the phenomenon of eutrophication, or aging, as the most serious problem. Eutrophication refers to the fertilization of the water by steady addition of organic matter. It can be natural, from the deposits of dying creatures, but in the lakes it is greatly accelerated by artificial discharges of nutrients. Eutrophication is irreversible. In Lake Erie, a shallower body than Lake Michigan, it has proceeded to the point where it may be necessary to dredge the entire lake bottom to keep the lake from becoming a bog.

The particular contaminants of Lake Michigan illustrate the need for speed in stemming the aging process. The Federal Water Pollution Control Act has been amended several times already, and it may well be amended further. Many proposals have been made for further provisions, including licensing, standards, stopping pollution before it occurs, taxes on polluters, and incentives for industrial waste treatment.

The bill we are now considering is most conservative. It is designed to expedite and strengthen the existing program, to enlarge it slightly and give it

the separate identity it needs if public opinion is to support us in this most important of all contemporary conservation struggles. It aims at essentials. It separates the three basic tools we require to protect water quality, and it sharpens all three: technology, incentives, and enforcement.

In pursuit of better technology, the Federal Water Quality Act of 1965 provides not only for continuation of existing grants for State water pollution programs and fellowships for training and investigation, but for a new program of research and development in the field of storm water overflow. I may say this is an increasingly important source of pollution as direct discharges of raw sewage begin to be eliminated. Grants can be made out of a total authorization of \$20 million annually to pay up to 50 percent of any project also approved by an official State water pollution control agency.

More incentives for the construction of treatment facilities are provided through a 50-percent increase in the Federal construction grants program. The total authorized amount will be \$150 million yearly, and the maximum for any one grant will be \$1.2 million—\$4.8 million for a project involving more than one municipality. These funds will now be distributed more consistently with real needs with more of the funds earmarked for large population centers where pollution problems are greatest.

Enforcement is tightened in three ways. First, the bill removes the entire program from the Public Health Service, which has not proved particularly effective in pursuing the abatement of pollution of interstate rivers. Second, the Secretary of Health, Education, and Welfare will have subpoena powers for hearings on pollution of interstate or navigable waters. This will enable Federal investigators to examine data on waste discharges, to inspect industries or other installations suspected of discharging damaging wastes and require the attendance of polluters at such

hearings. Finally, the bill gives the Secretary the responsibility to initiate enforcement action when he finds that substantial economic losses are resulting from pollution damages to shellfish. Shellfish contamination, one of the most destructive and hazardous consequences of pollution, has long merited this attention.

Mr. Chairman, it is said that nothing is so local as a drop of water, or so national as what we do with it. Our distinguished colleague the gentleman from Minnesota [Mr. BLATNIK] and the Public Works Committee have presented us with a worthy measure.

There is no doubt that these amendments will be affirmed by this House. We are summoning forth the means to restore our damaged water resources and to protect our still healthy streams. Water, our most valuable national commodity, is now one of our greatest national problems. I wholeheartedly support this bill, and I urge the House to endorse it as a worthy response to that problem.

Mr. WOLFF. Mr. Chairman, the present state of the Nation's polluted waterways mirrors the long shameful years of neglect and permissive disregard which preceded our aroused concern for protecting and improving the quality of the Nation's precious water resources. Instinctively our initial efforts to halt the pervasive besmirching of our streams have been directed to the clean-up of the most serious pollution situations. An impressive start has been made through the application of the Federal enforcement authority in approximately 34 instances. The continuing existence of almost 90 equally serious pollution situations calls for further intensifying and accelerating the enforcement momentum, which received its most meaningful impetus after the change of administration in 1961. We have made and continue to make significant strides in controlling pollution from municipal sources. The provision of Federal grant assistance to municipi-

palities for construction of waste treatment works has rolled up an imposingly successful record. The struggle against water pollution has thus far proceeded on these two fronts of control and abatement.

In committing the Nation to an all-out effort in this field, President Johnson calls on us to take up the challenge on a third front—prevention of pollution before it happens. We can no longer afford to complacently allow pollutants to enter our streams, waters, and beaches except under strict and careful regulation. This is doubly true in the case of the newer wastes increasingly spawned by our rapidly growing and fast-changing technology.

The enormously complex character of these newer wastes and their potential effects on the quality of water is either inadequately understood or totally unknown. Their wholesale disposal into our waters amounts to another variation of the deadly game of Russian roulette with the difference that we are risking the health or welfare of entire populations.

Necessary authority or measures for preventing the inception of pollution are lacking in the enforcement provisions of the existing Federal Water Pollution Control Act. State laws, the great majority of them, contain such authority in provisions for establishment of standards of water quality. For whatever reasons, the States have not effectively implemented these provisions of their own laws. Their failure is reflected in the countless miles of polluted waterways and beaches throughout the Nation. The need for Federal action is urgent, especially in regard to interstate water areas where Federal responsibility is clear cut.

Current proposals for Federal establishment and enforcement of standards of water quality on interstate waters fully safeguard State and local interests. They do not represent in any way an infringement of States rights but instead are designed to encourage the States to

face up to the problem realistically. Practical standards will serve to prevent our few remaining clean waters from becoming polluted. These same standards applied to waters already afflicted with the scourge of pollution will provide guidelines for improving the quality of these waters to serve all useful purposes. Standards fairly applied will help in eliminating the unwholesome competitive advantage for industry enjoyed by those States which are willing to sacrifice a noble heritage for an illusive and temporary economic benefit. Temporary, yes, for once the industry has fouled these waters to the extent that it cannot use it for its own needs, it too, will move out.

Time has long since run out for the purely "voluntary persuasion" policy that has marked State and local efforts to deal with the problem of pollution. The mounting volume of wastes generated by our advances in population, urbanization, and technology, require determinedly forceful measures. Strong leadership has been asserted by the President in behalf of the Nation. We in Congress can do no less than to legislate the strengthened and improved authority that is necessary to implement this leadership, under which Federal, State, and local action can confidently join in the knowledge that their concerted efforts will successfully control, abate, and most importantly, prevent water pollution.

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Mr. SCHEUER. Mr. Chairman, I ask unanimous consent that the gentleman from Connecticut [Mr. MONAGAN] may extend his remarks at this point in the Record and include extraneous matter.

The CHAIRMAN. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. MONAGAN. Mr. Chairman, I urge the adoption of S. 4, the Water Quality Act of 1965, as it has been amended and reported to the House by

the Committee on Public Works. For the past 3 years the Natural Resources and Power Subcommittee of the House Government Operations Committee on which I serve has been conducting, under the chairmanship of the gentleman from Alabama [Mr. JONES] an exhaustive survey of our Nation's water pollution and from this study I have become convinced that there is great need for a stepping up of Federal assistance, greater local enforcement procedures, and a pattern of local, State, and Federal cooperation to abate and stamp out pollution. I have been taking an active interest in the legislative effort to bring about these improvements and I have in the last three Congresses filed bills to amend the Federal Water Pollution Control Act for this purpose. The bill which I filed in the 89th Congress is H.R. 3716.

I am convinced that the bill we have before us today is an improvement over the bill passed by the Senate and I note that this belief is shared by the New England Interstate Water Pollution Control Commission.

Water pollution is a problem which affects every community and every State in the Nation. It is increasingly acute because water demand and water pollution are mounting sharply at the same time.

Local communities and States cannot or will not bear the cost of abating pollution. It is my feeling that the Federal Government must step up its participation without further delay if we are to meet the crisis confronting us in the shortage of usable, clean water. Some efforts have been made and are continuing, but we must be shamefully aware that in spite of these efforts all our major streams, rivers, and lakes are suffering increasing pollution. On the basis of the study of our subcommittee I am of the opinion that, apart from foreign problems, water pollution is the Nation's single most serious hazard.

The House Public Works Committee in its examination of this problem con-

sidered, among others, my bill, H.R. 3716, and I was privileged to have the opportunity to testify in support of my bill before the committee on February 19, 1965.

On the evidence, one must concede the importance of establishing water quality standards, increasing grants for sewage treatment projects, improving administration of the Federal water pollution control program, and setting up a research and development program to cope with the problem of storm and sanitary sewage. President Johnson supported these objectives in his recent message on natural beauty. He also advocated an increase in ceiling for grants to State water pollution control programs. These provisions have been incorporated in the House committee's bill and I note with satisfaction that the committee has also given its endorsement to my recommendation to increase the authorized appropriation for sewage disposal plant construction grants from \$100 million to \$150 million for fiscal years 1966 and 1967. Actually, I had requested an increase to \$150 million in 1966 and \$200 million in 1967.

Mr. Chairman, without going into full details of this proposed legislation, since they have been fully explained by the able committee chairman, I want to state my support of the inclusion in the act of directive to the Secretary of Health, Education, and Welfare to initiate Federal enforcement action when he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution and action of Federal, State, and local authorities.

I also favor the bill's requirement that Federal pollution control funds be withheld from any State which fails, within 90 days after enactment of the act, to file a letter of intent with the Secretary of Health, Education, and Welfare undertaking that the State will, prior to June 30, 1967, establish water quality criteria to be applicable to interstate waters within the State.

Mr. Chairman, I believe that if we are to preserve the greatest of our national resources and afford an essential measure of protection to the future health, welfare, and economy of a nation which obviously has been remiss in meeting its responsibility in this regard, we must act now, and the enactment of S. 4 as recommended by the House Public Works Committee would be a mighty effective step in the right direction.

In support of this legislation I shall include a very timely article which appeared in the Hartford, Conn., Courant of Sunday, April 18, 1965. The article entitled "War Against Water Pollution Is Lots of Talk, Little Action" by E. Joseph Martin.

#### WAR AGAINST WATER POLLUTION IS LOTS OF TALK, LITTLE ACTION

(By E. Joseph Martin)

Once upon a time Connecticut cared about keeping its rivers and streams clean.

Time was when people were stirred up enough to act.

But as the years go by, more and more people are talking about water pollution while fewer and fewer people are doing something about it.

Rivers continue to be polluted. Fish continue to die from industrial wastes dumped into waterways. Instead of drinking water more and more families draw detergent suds from their wells.

As the problem grows, Connecticut's initial commitment to act has become stagnated.

Connecticut's war against pollution was declared when the general assembly passed a law in 1925, but the battle has since become an extended skirmish and 40 years later victory is still 20 percent unrealized.

The law created a new agency to eliminate and control dirty rivers and streams. There were about 1.4 million people in Connecticut when the law creating the State water commission was passed. The population has since nearly doubled, the number and variety of industries continues to mount, and the number of contaminated wells also continues to increase.

However, with this increase in potential water polluters, the manpower in the State agency responsible for keeping the rivers and streams clean has remained about the same and has even diminished.

The State water resources commission was formed in 1957 to take over the duties of

the State water commission and other agencies. Today, the commission has a staff of 10 engineers and 3 secretaries, the same number the water commission had 30 years ago.

Besides the additional number of staff help needed to keep pace with the growing problem, this same understaffed commission is responsible, in addition to water pollution, flood control, shore and beach erosion control, supervision of dams, structures and dredging in navigable waters, water resources inventories and other duties.

Today, 1,192 plants are treating waterborne wastes from industries, municipalities and institutions. Some 975 of these are treating sewerage and sanitary wastes and 217 are treating waste water from industries.

William S. Wise, director of the Water Resources Commission, says the State needs 235 more plants to treat industrial wastes and 46 more sewerage treatment plants.

Ten years ago, his staff started operations by projecting how long it would take to complete the water pollution control plants. The projects were placed into two phases.

Phase 1 was to complete sewerage treatment plants and was scheduled for completion this year. Phase 2 was the time needed to complete all industrial waste treatment plants. Target date was set for 1970.

However, because of the serious deficiency in the number of staff personnel, the sewerage treatment schedule was advanced to 1970 and the industrial treatment schedule advanced to 1975.

Five years ago, a commission study showed it needed a staff of 29 to do the work, more than double the number it now has. A Federal study later indicated the same commission would need a minimum of 46 and a maximum of 57. Wise, however, still thinks the figure of 29 is more realistic.

Budget requests for more staff have continually been cut back.

Can it be that the State administration and the general assembly wish to give only token attention to water pollution? If it did not so wish, why did it overburden the commission with so many other added duties?

Is it possible that a deliberate attempt is underway to slow down this State's initial drive against dirty water?

Wise has been reluctant to blame anyone for the apparent legislative and administrative apathy. He says the commission's record "points to notable progress. But," he says, "it also shows that we still face complex problems."

These complexities he enumerates:

The many suburban residential developments building beyond sewerage facilities and in inadequate drainage areas near small, clean streams.

Estuaries and tidal rivers complicating the receiving of outward flow from waste treat-

ment facilities.

Ground disposal and treatment of various types of sanitary and industrial wastes and the treatment of disposal of wastes resulting from the production and the use of toxic substances, chemicals and pesticides, etc.

Besides these added so-called complexities, Wise and his staff do not have the manpower to regularly inspect the waste treatment plants already built. How can the commission expect the treatment plants built to continue to do the job if no staff is provided to see that they do?

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Last month residents from East Hampton complained about the red color of the Salmon River.

The color came from paper fibers discharged from a paper company. Wise and his commission have had the plant under observation for 20 years. Different pollution control devices were tried with varying degrees of success.

After 20 years, paper company officials were threatened with formal commission action if the company did not find a satisfactory remedy by Monday. And after 20 years, a plant apparently equipped with a waste treatment facility is still polluting the Salmon River.

Is it enough to rationalize the problem away by admitting to complexities and the huge amount of work still left undone?

Wise admits his staff has been slowed down by many obstacles. These he said were the money hurdle and getting public and private officials to put pollution control on a priority list of importance.

But there must be a limit to buck passing. If enough money cannot be raised to pay for an adequate staff after the problems and complexities have been clearly stated, who is actually responsible? Or has the problem actually been clearly stated?

If the administration does not consider water pollution an important enough problem to solve effectively, who is responsible for making them recognize the importance?

Forty years ago, Connecticut thought the problem was serious enough to pass a law to solve it. Forty years have passed and administrative apathy has all but thwarted the law's directive.

Mr. TUNNEY. Mr. Chairman, I would like to express my support for the water pollution bill which is now before the House.

This legislation, S. 4, the Water Quality Act of 1965, will provide effective pollution prevention and enforcement. The bill has provisions for:

First. Setting water quality standards.

Second. Increasing the Federal grant ceilings for multimunicipal construction projects and State pollution control programs.

Third. Promoting research into the problems of mixed storm drainage and sanitary sewage systems.

We were once a nation that was proud of the beauty and majesty of our national resources. Today every major river system is polluted. Millions of Americans are denied the use of recreational areas because of widespread pollution. Furthermore, this pollution is detrimental and costly to our economy. It is very expensive to treat polluted drinking water.

The passage of this bill is essential if we are to return America to the beautiful Nation that it once was and can be once more. We must all be aware of the quiet crisis that we face with regard to the preservation of our natural resources. Industry and government at all levels work closely together in the area of pollution control. The passage of the Water Quality Act is important to insure that the Federal Government does its share to preserve our most precious resource—water.

Mr. GRABOWSKI. Mr. Chairman, it is a great pleasure for me to join with my distinguished colleagues in support of the legislation before the House. With a great many Americans I have always been concerned with the quality of water resources. For many years I have believed that our Nation's streams constituted the lifeblood of the Nation's health.

Our people require clean water in every respect whether we are referring to drinking water or to those leisurely hours when we vacation with family and friends near a cool lake. It is important that the quality of the water be of the highest possible standard.

In supporting this legislation, I am aware of the great efforts that have been made by the members of the House Pub-

lic Works Committee, and by various Members in the other body. I have followed this work and I have read through the hearings that have been held in each body. I have been convinced that their work merits our great admiration. And I want to take this opportunity to praise the distinguished gentleman from Minnesota [Mr. BLATNIK] and all other Members who have worked so diligently on this legislation to amend the Federal Water Pollution Control Act, as amended.

This legislation has many, many interesting features. It establishes the Federal Water Pollution Control Administration. It provides grants for significant R. & D. matters and increases the grants for construction of municipal sewerage treatment works.

It is a time worn cliché to say that water is our greatest resource. As we look across the broad expanse of the globe, we can readily see that water constitutes a much wider area than land. We have been particularly fortunate here in the United States and it is absolutely imperative that we begin now on the course to settle the issue of pure water for all time. As was stated so poignantly in the House committee report to accompany S. 4, "the issue of pure water must be settled now for the benefit of, not only this generation, but for untold generations to come."

Mr. Chairman, in my judgment, the legislation before the House today will start us on the road to substantial and necessary improvement of our Nation's waterways. In two brilliant messages since January our distinguished President has called for improvement of our Nation's waterways. And back in the mid-thirties another great Democratic President said:

To some generations much is given, to others much is expected. This generation of America has a rendezvous with destiny.

These memorable words of Franklin Delano Roosevelt apply to the present problem at hand.

Mr. Chairman, I know that other

Members of this distinguished House will speak to the specific aspects of this legislation. I want to conclude my remarks by simply saying that I believe—that in terms of water quality improvement—this generation of Americans has a challenge and a moral commitment to start the long process of cleaning up our streams. I also know that representatives of the local governments and industry are prepared to begin together the long and difficult task that lies ahead. The legislation before us, as approved unanimously by the House Committee on Public Works, will start the ball rolling. I urge its immediate enactment. It will be of lasting benefit to all residents of the Sixth Connecticut District.

Mr. HELSTOSKI. Mr. Chairman, in my own district we have two major rivers, and I am sorry to say we cannot boast today of the beauty of either one. The Passaic and Hackensack Rivers at one time, however, were pure and beautiful. They once served our area not only for transportation but for recreation as well.

The encroachment of industry, uncontrolled until recent years, has changed that picture. Today, no one would bathe in either river because of heavy pollution and there are few fish able to survive the contents of the tidal areas in either stream.

This has become a growing problem, long overdue for correction. It has reached a point where many homeowners are affected directly—by peeling paint, unpleasant odors, and unsightly waterfronts.

It is my belief that the proposed amendment to the Federal Water Pollution Control Act will begin to correct these shortcomings in my district and in similarly affected communities throughout the Nation.

This bill is a necessary forward step in our national effort to solve our water pollution problem and to bring about proper water quality. It upgrades the existing program; provides incentives for the participation of States in assist-

ing local governments to finance the construction of necessary waste treatment works, and requires the establishment of water quality criteria by the States.

The creation of a Federal Water Pollution Control Administration within the Department of Health, Education, and Welfare by this legislation will lead to a strong national policy for the prevention, control, and abatement of water pollution.

The question of water quality standards, Mr. Chairman, is one of prime importance in my own district. Large portions of New Jersey and neighboring States are now faced by the results of a 4-year period in which we received less-than-normal rainfall. Our reservoirs have been drained to dangerously low points at times and many of our areas have had to ration water during hot summer days.

Cleaning up our rivers under this act could lead to finding and developing new sources of water for consumption.

This bill will open new areas of cooperation between the States and Federal Government. In this program, States and local agencies will benefit from research, investigations, training and information programs developed by Federal Water Pollution Control Administration. And since waterways do not recognize State boundaries, local efforts could result in providing purer water for large areas.

This amendment also provides the means for communities—particularly our older cities—to find the means to combat problems caused by antiquated sanitary and storm sewers.

This bill will aid many additional communities by doubling the dollar ceilings limitations for construction of waste

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treatment works from \$600,000 to \$12 million for an individual project and from \$2.4 million to \$4.8 million for a joint project in which two or more communities participate. This dollar in-

crease will still limit the Government to 30 percent of the total cost of the project, but is a more realistic figure based on present total construction costs. It will provide the degree of help necessary for larger cities and for those once-small communities which suddenly have found themselves mushroomed into city-like proportions. Their sewage treatment problems have grown at the same pace.

These, Mr. Chairman, I consider to be necessary services and aids for our communities. I strongly support this fight to combat water pollution and urge my colleagues to join me in voting for passage.

Mr. MORSE. Mr. Chairman, I rise in support of S. 4 as reported by the Public Works Committee.

In the 9 years since Congress first enacted a permanent program for an assault on the growing problem of water pollution, we have made important strides in the improvement of water quality. In 1961, I supported legislation to broaden and expand this program and was particularly pleased that the research function would be emphasized to a greater degree.

The efforts to date have borne fruit, but as the Public Works Committee has pointed out, we are just holding our own—we are not really getting at the root of the problem.

For this reason, I think that the bill before us today is necessary. If we wait much longer to intensify our attack, the battle may be lost.

It is estimated that we will be doubling our water consumption in the next two decades. It is clear that we have got to develop far more effective means of reusing water if we are to meet the rapidly rising demand for water for home, industrial, and scientific use.

This bill contemplates such an effort by including funds for projects to develop new means of waste disposal and control of discharge from sewers. Water treatment also will benefit. The cost of pollution control is expensive. But how much greater is the cost if we measure

it in terms of lost opportunities for industrial development, or in terms of the health and happiness of our communities.

This legislation properly removes the limit on grants for waste treatment plants. At the same time, however, it provides incentives for State and local initiative and participation.

In short, it creates the opportunity for real partnership in this field.

In New England and particularly in Massachusetts, we have been blessed with an abundance of water for power and recreational purposes. I believe that this legislation can provide us with an opportunity to preserve that precious resource and open up a new era of economic growth and give our people the pure water they need for health and recreational use.

I urge the passage of the pending legislation.

Mrs. DWYER. Mr. Chairman, the pending bill, the Water Quality Act of 1965, can represent a major advance in one of the most critical problem areas facing the country—the need to clean up our waterways and assure our people of adequate quantities of clean water.

I strongly support this legislation, and I am pleased to note that it has come to the floor of the House with broad bipartisan backing.

New Jersey, Mr. Chairman, is no stranger to water pollution or to water shortages. As the most heavily populated and most intensively industrial of all the States, we have greater need for good water and face greater danger from polluted water and from inadequate supplies of clean water than most others.

In recent years, several of our communities have been forced to ration their water during periods of drought, while along sections of our seashore widespread pollution, at least temporarily, destroyed much of the shellfish industry and rendered useless miles of beaches for recreation purposes. Few of those who have been affected are likely ever to forget the role in their lives played



by clean water.

More immediately, Mr. Chairman, northern New Jersey faces the most serious water shortage in its recent history. State and local officials are warning that 3 years of drought have reduced the huge reservoirs serving Newark and other major communities in the State to their lowest levels on record for this time of year. Last week, for instance, the two principal reservoirs in the area were down to 56 percent and 31 percent of capacity, respectively, whereas this time last year they were filled at 95 percent and 75 percent of capacity, respectively.

This impending emergency has not been created solely by inadequate rainfall. New Jersey, like most of the rest of the Nation, has plenty of water. But too much of it, including some of our biggest rivers, is so thoroughly polluted that it cannot be utilized as a source of public water supplies or even, in many cases, for industrial purposes.

Controlling and reducing and, finally, eliminating pollution from our lakes and streams is the only certain way of guaranteeing our people the water we need.

About 9 years ago, Mr. Chairman, Congress established the first comprehensive and permanent program for controlling water pollution. At that time, as the House Public Works Committee noted in its report on the present bill, "untrammeled pollution threatened to foul the Nation's waterways beyond hope of restoration."

Gradually, the committee believes, we have reached a point where we are just about holding our own. But that is not enough. In the face of unprecedented population growth, economic expansion, and rapid urbanization, the only way to keep up is to stay ahead. It is most significant that the committee was unanimous on this point. Both Democrats and Republicans—without exception—recognized this fact of life and voted to report the bill favorably. Since the bill was reported, the House Republican policy committee has joined in calling for

its enactment—an excellent example of a bipartisan response to a national need.

The first water pollution control bill in 1956 defined the role of the Federal Government as primarily one of supporting and strengthening the activities of State, interstate, and local agencies. The program was improved in 1961, and the present bill will carry it forward again. But in all cases, Congress has recognized that nothing less than wholehearted cooperation between all levels of government will do the job. Congress and the executive branch can prod, encourage, advise, and help support the States and local communities. But it cannot step in and take over full responsibility for a problem that must, by its nature, be handled where it exists.

In 1962, the Advisory Commission on Intergovernmental Relations, on which I serve as one of three House Members and which is responsible for promoting greater Federal-State-local cooperation, recommended several improvements in the water pollution control program. The Commission proposed, among other things, that greater public investment in water supply and sewerage treatment facilities be encouraged; that the dollar ceilings be increased for individual grants for construction of sewerage treatment facilities so as to provide more help for larger cities; that grant ceilings be increased to encourage construction of joint projects serving two or more communities; and that an added incentive be provided to encourage the construction of waste treatment projects in conformity with regional or metropolitan area development plans.

Having introduced legislation in the previous Congress to implement these recommendations, I am especially pleased to note that the committee has included each of those I have mentioned in the bill now before us.

In addition, Mr. Chairman, the committee bill would also do these other important things:

Improve administration of the program by means of the proposed Federal

Water Pollution Control Administration, the sole responsibility of which would be the prevention, control, and reduction of water pollution. Presently, this objective is only one of the many different jobs of the Public Health Service and this fact may help account for the rather unimpressive record of enforcement to date.

Encourage the development of new methods of controlling the discharge from storm sewers.

Promote the construction of larger waste treatment projects serving more people.

Require States to establish standards of water quality for the rivers, lakes, and other waterways they share with neighboring States, so that one State will not be polluting waters which also belong to others.

In connection with water standards, Mr. Chairman, it may be appropriate to echo the cautionary hope expressed by the League of Women Voters of the United States that the setting of water quality standards will not lead to protection of the status quo where existing conditions are poor or to further delay in

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making improvements. Such standards can and must be employed to upgrade continuously the quality of the waters concerned. There is no other justification for standards.

Water, Mr. Chairman, does not make headlines until there is too little of it. By passing this bill, the House will help to keep water out of the headlines and in the homes and industry of America.

Mr. REUSS. Mr. Chairman, water pollution in our country is not being halted at a pace fast enough to protect our water supplies. The amendments to the Federal Water Pollution Control Act being offered today represent the next major step in the fight to control this pollution. In formulating these amendments, concerned Congressmen have been searching for the combination of programs, responsibilities, and jurisdic-

tions that would best enable us to halt the growing pollution of our streams. I hope that Congress will soon decide that the only way markedly to step up the pace of pollution abatement is to allow the Federal Government to set standards for water quality in interstate streams.

Water quality standards are neither new nor radical. They are a device that the Federal Government is copying from the States. In 1962, at least 40 out of 50 States had water pollution control laws which provided for the establishment of standards, criteria, objectives, or other similar schemes to preserve water quality. I believe that there is very little argument among water pollution control officers about the necessity for guidelines and standardization of requirements for water quality. Without them, regulatory programs can become arbitrary and difficult to enforce. The only argument is about how to make such standards work.

The States have had numerous difficulties in prosecuting their standards. Out of those 40 States with power to establish standards, 10 have never actually promulgated any standards at all; 10 have standards which apply only to certain rivers; and many have only objectives, vague and with little legal force.

Most State water pollution control programs are greatly understaffed, with insufficient appropriations even for inspection and enforcement, not to mention funds to help municipalities and industries build waste treatment facilities. As a result, State standards, despite the good intentions of State officials, have been of little help in abating pollution.

One reason for this failure is the variability of standards from State to State. It is difficult for a State official to insist that an industry improve its treatment facilities to meet standards if that industry can threaten to move to a neighboring State where standards are lower. Furthermore, there is little incentive to clean up a stream to meet standards if

upstream neighbors are allowed to discharge wastes within a much lower standard.

Another reason is the difficulty of arriving at reasonable standards. In most States, the process has involved lengthy hearings and technical services, costs which lie heavily on State budgets. Particularly in those States which employ classification of streams, that is, determining the legitimate uses of the stream before prescribing necessary waste treatment, the procedure is inordinately lengthy. Finally, when standards are set from an exclusively local level, with budget problems and heavy opposition from industries and municipalities with a vested interest in being allowed to continue polluting, there has been a tendency to set standards or classifications very low, with little improvement over the current condition of the stream required. Where classification is employed, for example, we have seen many streams actually classified as suitable primarily for the transportation of sewage—that is, condemning a river to be a sewer. I do not believe that this country is so poor or so callous toward its beautiful, but limited water resources that we need to condemn entire reaches of rivers to be nothing but sewers.

Opponents of water quality standards have, I believe, tended to obscure the issue by bringing up arguments that actually have no relevance to the proposal. Standards, as I have pointed out, are nothing new; almost all the States have found them necessary. Standards can never be universal, applying with equal severity to all streams regardless of size or use. Standards can, of course, be amended upwards or downwards at any time; they are, of course, subject to judicial review like any other administrative ruling; and they can, of course, only be laid down after proper consultation with all parties concerned. These are assumptions never questioned by those of us who support a provision for Federal water quality standards.

The only real argument is whether we will continue to place the entire burden of setting the goals for our country's biggest conservation cause on the already overburdened shoulders of the States. Much aid would be rendered to the State programs by a Federal standard-setting procedure. In many cases, the Secretary of Health, Education, and Welfare would put the weight of his Department's program behind already existing State standards, making them easier to enforce. The Department could also be of particular help to downstream water-users, who have attempted pollution control but have had their efforts undone by their upstream neighbors. In States where permits are issued to waste-dischargers, a Federal standard-setting procedure would help in reviewing and issuing permits judiciously.

From the Washington vantage point, as Congressmen of the United States, we have the opportunity to view as a totality the immense worth of the country's water resources. We must make use of our nationwide view of the problem to provide the inspiration and leadership to step up the fight against pollution. Congress has recognized the responsibility of the Federal Government to lead the Nation in other conservation battles, and I am sure it will assume the same responsibility in this case.

Mr. VANIK. Mr. Chairman, I wish to commend this hard-working committee and its diligent chairman for their labors on this crucial measure. There is no group more keenly aware of the severe nature of the problems of water purity and supply than the chairman and his committee.

This bill will aid immeasurably in our fight to preserve our water supplies. Under the 4-year \$20 million project development program new methods will be discovered to control storm sewer systems and sanitary sewage treatment. These efforts are an invaluable part of a total water pollution control program.

By doubling the ceiling of grants to individual projects to \$1.2 million and

twice that amount for joint projects in individual locales are further assisting in the realization of projects which have been long overdue. The 10 percent incentive above the ceiling has merit since it is based upon the development of a comprehensive plan for a metropolitan area.

The several States must take the initiative of participating in this program by filing a letter of intent within 90 days to the Secretary of Health, Education, and Welfare that the State will establish water quality criteria applicable to interstate waters before June 30, 1967. It is my hope that my State of Ohio will not delay the implementation of this law by waiting the maximum time allotted.

As matters stand now the State of Ohio has refused to acknowledge that the critical problem of pollution of the waters of Lake Erie is a matter for the Federal Government to treat. The several States have neither the capacity nor manpower to effect a meaningful comprehensive program. The failure to act by the States has cost millions to those who depend upon Lake Erie and the other Great Lakes for fresh water, commerce, and recreation. The moneys already lost have been multiplied manifold as lake-related businesses have been stunted, decreasing jobs and tax revenue. Therefore, it was my hope that the Federal Government will have the opportunity to act when there is inaction by the States.

At the present time, Lake Erie is the largest body of contaminated fresh water in the world. Rich oxides and chemicals have permanently settled in the lake bottom and the level of this "life-killing" pollution is steadily rising and widening. Attractive marine life has all but vanished. Recreational values of the lake have diminished. The Lake Erie shores through three States between Detroit and Buffalo are replete with evidence of contamination. The Department of Health, Education, and Welfare has nevertheless determined that while there is serious and unquestionable pollution,

it has not yet been proven to be interstate in nature qualifying Federal entry.

In the meantime, the Governor of Ohio has called for a Great Lakes Water Pollution Conference for Monday, May 10, at which he has invited other Governors of the Great Lakes area to consider the water pollution problem. On March 26, 1965, I wrote the following letter to Governor Rhodes:

It is with great interest that I learned today of your decision to call for a conference on Lake Erie pollution. The problem was certainly not understated and the plea for joint consideration of this matter by the

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Governors of all the States of the Great Lakes Basin is laudatory.

However, I am gravely concerned that the organization of the Great Lakes Water Pollution Compact and the development of studies and recommendations alone by that compact would serve to delay the direct solution of the problem.

An interstate compact among the several States would take an extended period of time to organize and would duplicate, in effect, the comprehensive studies which are currently being completed by the Public Health Service.

As matters stand now, the Department of Health, Education, and Welfare of the United States is ready, willing and able to schedule immediately a conference on Lake Erie pollution if you formally request it. Secretary Anthony J. Celebrezze told me last Monday, that a Federal conference on Lake Erie could not take place unless you request it.

Under Federal statutes a Federal Conference on Pollution is a mandatory prerequisite for the development of recommendations for pollution abatement and control. If these recommendations are not followed the Federal Government is then authorized to proceed to the courts to compel compliance with the "cleanup" directives.

It is my hope that the Governor's conference will not delay Federal entry into the solution of this problem.

I therefore urge that you request Secretary Anthony J. Celebrezze of Health, Education, and Welfare to proceed forthwith with a Federal Water Pollution Conference to meet simultaneously with the organization of a Governors' compact so that no time is lost in approaching effective solutions to the problem.

Mr. Chairman, I would interpret the vote on the legislation we consider today to indicate the tremendous public reac-

tion and support to the Federal Government's activity in this field. It is my further hope that the Cleveland Water Pollution Conference called by Gov. James A. Rhodes will result in a call for a Federal water pollution conference on the Lake Erie problem so that the Federal machinery implemented by this bill may be put into motion.

Mr. ROUSH. Mr. Chairman, there can be no denial of the existence of a water pollution problem in our Nation. If there was no problem we would not be considering the legislation before us today.

There are other Members here who can claim and will, I am sure, exhibit a more detailed knowledge of this most serious subject than I can set forth. I wish to comment briefly on the urgency of the matter with which we are faced.

Time is a relative matter and 20 years can, from one point of view, appear to stretch out into the future in a seemingly interminable manner. But on this subject of water pollution, and the need to reduce and eliminate it, the end of the 20-year period is tomorrow.

By 1985 our Nation's population will have increased by 75 million people. This number is equal to the present population of the area extending from New York and New Jersey on the east to Illinois and Wisconsin on the west.

If we continue the present pace of attack on the water pollution problem on through the next two decades we will find ourselves almost hopelessly behind. It is imperative we upgrade our procedures and our efforts if we even hope to stand still in this area of need. The measure we are considering today will lend much-needed strength to the efforts of our States and cities and towns to combat this problem so vital to the health of our people.

We ourselves and our ancestors have grossly mismanaged this most precious heritage of clean water. It remains for us to insure this heritage will be handed on to those who come after us if we are to meet our responsibilities. We can do

no less than to make certain the problem will not increase. We should do more so that the clean, clear streams, rivers, and lakes of yesteryear will be restored to their original state.

Mr. FARNUM. Mr. Chairman, it is our opportunity today to take effective steps to safeguard the greatest of all natural resources, which is pure water, for all generations to come.

That we have this opportunity is due in large measure to the farsightedness and dedication of an astute colleague, the gentleman from Minnesota, the Honorable JOHN A. BLATNIK, which is a State with problems much like those of my own Michigan, a State aptly called "The Water Wonderland."

As long ago as 1956 he helped build the base upon which the able Committee on Public Works, through its distinguished chairman, the gentleman from Maryland GEORGE H. FALLON, has helped him bring to the floor this bill so vital to the future of our nation.

It is of great importance, it seems to me, that primary responsibility for much of the effort to prevent, control, and abate water pollution is placed with the respective States and that promptness in action is encouraged through the requirement that each State to receive funds must demonstrate within 90 days after the day of enactment intent to establish water quality criteria applicable to interstate waters.

Let us hope that each of the States will take this local initiative to solve locally its own portion of the most pressing national problem facing us in the years immediately ahead.

It is important, of course, in the realm of the practical to underline the importance of the problem through establishment of a Federal Water Pollution Control Administration within the Department of Health, Education, and Welfare.

It is time indeed that we have an agency that will devote its total energies to attacking the pollution problem.

Increasing the amount of a single

grant for municipal sewage treatment from a maximum of \$600,000 to \$1.2 million is certainly a step in the right direction as is the provision which grants of up to \$4.8 million when two or more community applications are combined.

Passage of this bill will be a great step forward in building the America those who come after us will enjoy. With it we help to undo the mistakes of the past and restore the wonderful continent that our forefathers found when they came seeking liberty and the pursuit of happiness on these shores.

Mr. PHILBIN. Mr. Chairman, first, I want to extend my heartiest congratulations and my highest commendation to my dear friend and esteemed colleague, the outstanding chairman handling this fine bill on the floor, the gentleman from Minnesota, Congressman JOHN A. BLATNIK, and all members of the committee for the effective manner in which the bill has been prepared and presented to the House. I also want to thank the admired gentleman from Minnesota [Mr. BLATNIK], in particular, for the fair, balanced, informed and most impressive way in which he conducted the debate.

This bill is one of the most important that the Congress will be called upon to approve this session. First, because it relates to the health and well-being of the American people; second, because, as I have so often stated on this floor and elsewhere, the use, utilization, and control of water are of utmost importance to the American people and to this Government; and, thirdly, because this measure attacks the evil of pollution of our water supplies which is threatening us in so many ways these days; and fourthly, the issue of pure water must be settled now for the benefit of this generation and untold generations to come. The need, both public and private, is paramount.

This bill is one of several on the subject of water and pollution which this Congress has considered and approved within recent years. It is designed to enhance the quality and value of our

water resources, and to set a national policy for the prevention, control, and abatement of water pollution. The bill authorizes a four-year program starting this fiscal year at an annual level of \$20 million for grants to develop projects which will demonstrate new or improved methods of controlling waste discharges from storm sewers, or combined storm and sanitary sewers and provides contract authority for these purposes.

Federal grant participation is limited to 50 percent of the estimated, reasonable project cost, and may not exceed 5 percent of the total authorized annual amount for any one project. There is also a 25 percent limitation of the total appropriation on the funds which may be expended by contract during the fiscal year.

The bill doubles the dollar ceiling limitations on grants for construction of waste treatment works from \$600,000 to \$1.2 million for an individual project, and from \$2.4 to \$4.8 million for a joint project, in which two or more communities participate. The bill also gives the Secretary discretion to increase the basic grant by an additional 10 percent, if the project conforms to a comprehensive plan for a metropolitan area.

The bill also provides enforcement procedures to abate pollution resulting in a substantial economic injury from the inability to market shellfish or shellfish products in interstate commerce.

Proper safeguards for these enforcement procedures are in the bill to protect individual rights, require the production of appropriate evidence and to assure proper labor standards.

The chairman of the full committee, our most distinguished and beloved friend, the very able gentleman from Maryland, Congressman GEORGE H. FALLON, and all his colleagues on the committee, have long labored and have made

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effective contributions in the vital area of antipollution measures of the Federal Government, and it is noteworthy and

commendable that these very able colleagues of ours have so keenly and clearly recognized the great need of declaring war upon pollution before it spreads its devastating effects throughout even more of the country.

The fight against pollution must be designed not only to eliminate existing pollution, but to prevent further pollution, and to assist municipalities and the several States to achieve these necessary ends, in behalf of enlightened sanitation and public health, not to speak of conservation and recreation.

I have long been interested in this subject, and have joined most vigorously in the past in the efforts the Congress has made to purge the Nation of harmful pollution. I am, therefore, especially pleased again to lend my voice and to cast my vote for this meritorious bill.

I hope that the communities and States will avail themselves of this new and broad opportunity to press toward the complete elimination wherever need exists in our communities and in our country, in the interest of public health, in the interest of the individual citizen and family, and in the interest of a better, cleaner, more wholesome, and happier country for all.

Mr. GRABOWSKI. Mr. Chairman, it is a great pleasure for me to join with my distinguished colleagues in support of the legislation before the House. With a great many Americans I have always been concerned with the quality of water resources. For many years I have believed that our Nation's streams constituted the lifeblood of the Nation's health.

Our people require clean water in every respect whether we are referring to drinking water or to those leisurely hours when we vacation with family and friends near a cool lake. It is important that the quality of the water be of the highest possible standard.

In supporting this legislation, I am aware of the great efforts that have been made by the members of the House Public Works Committee, and by various

members of the other body. I have followed this work and I have read through the hearings that have been held in each body. I have been convinced that their work merits our great admiration. And I want to take this opportunity to praise the distinguished gentleman from Minnesota [Mr. BLATNIK] and all other Members who have worked so diligently on this legislation to amend the Federal Water Pollution Control Act, as amended.

This legislation has many, many interesting features. It establishes the Federal Water Pollution Control Administration. It provides grants for significant R. & D. matters and increases the grants for construction of municipal sewage treatment works.

It is a timeworn cliché to say that water is our greatest resource. As we look across the broad expanse of the globe, we can readily see that water constitutes a much wider area than land. We have been particularly fortunate here in the United States and it is absolutely imperative that we begin now on the course to settle the issue of pure water for all time. As was stated so poignantly in the House committee report to accompany S. 4:

The issue of pure water must be settled now for the benefit of, not only this generation, but for untold generations to come.

Mr. Chairman, in my judgment, the legislation before the House today will start us on the road to substantial and necessary improvement of our Nation's waterways. In two brilliant messages since January our distinguished President has called for improvement of our Nation's waterways. And back in the midthirties another great Democratic President said:

To some generations much is given, to others much is expected. This generation of America has a rendezvous with destiny.

These memorable words of Franklin Delano Roosevelt apply to the present problem at hand.

Mr. Chairman, I know that other

Members of this distinguished House will speak to the specific aspects of this legislation. I want to conclude my remarks by simply saying that I believe—in terms of water quality improvement—this generation of Americans has a challenge and a moral commitment to start the long process of cleaning up our streams. I also know that representatives of the local governments and industry are prepared to begin together the long and difficult task that lies ahead. The legislation before us, as approved unanimously by the House Committee on Public Works, will start the ball rolling. I urge its immediate enactment. It will be of lasting benefit to all residents of the Sixth Connecticut District.

Mr. DUNCAN. Mr. Chairman, I am delighted that this bill has reached the floor of the House and will soon become law. The gentleman from Minnesota [Mr. BLATNIK] deserves the applause of the Nation for his efforts. There is no more important factor in the future of this country than water and the time is long since past when it should have had more of our attention. Parochial and personal considerations can no longer defer the solution of this problem.

I sit on the appropriations subcommittee handling the appropriations for this subject. Testimony was presented to us that 1,511 requests for Federal grants were in preparation or under review, all with the necessary local financing. With our present \$100 million authorization only 800 of these sewage-disposal projects can be built; \$184.8 million in Federal funds is required to cover the applications in already, not to mention those that can still reasonably be expected during the next fiscal year.

Because I am convinced that the time is here when we must cease polluting our rivers and estuaries; because we have the knowledge now to correct this grave deficiency in our civilization I am convinced that we cannot afford not to proceed with all possible speed to eliminate the blight of pollution. For that reason I introduced H.R. 5377 for the

purpose of doubling the authorization for matching funds for pollution control from \$100 million to \$200 million. This bill adds \$50 million for which I am grateful but which I consider to be inadequate. I am, nevertheless, willing to take half a cake to no cake at all.

I am also concerned about the change from the Senate bill to allow the States to set their own water quality standards. Certainly I would far prefer the States to handle this problem as I would so many of the others. But they have not done it so far and I doubt that they can under this law. I envision an interstate stream dividing two States which are commercial rivals with similar industries with disposal problems. It is obvious that both States must agree or there will be no standards. It will be the purest of coincidences if both States can set standards which will clean up the stream.

Again I say, that, while the bill is not perfect, it represents a step forward. The States have their chance. I hope they will succeed. If they do not, we must.

Mr. ZABLOCKI. Mr. Chairman, I rise in support of the Water Quality Act of 1965.

At the outset I want to commend the gentleman from Minnesota [Mr. BLATNIK] and the other members of the Committee on Public Works for reporting this important and necessary piece of legislation to the floor for action.

Our population is growing rapidly. In 1900 there were 76 million Americans. In 1950 there were 150 million. In 1960 there were 180 million. By 1980 it is expected that our population will reach 260 million. Obviously the more people there are the more water we have to have and the more sewage there will be. In the past 100 years water consumption in the United States has risen from a few gallons a day per person to about 700 gallons daily per person. Today the Nation is using approximately 323 billion gallons of water daily. Of this amount, industry uses 160 billion gallons; irriga-



tion, 141 billion; municipal, 22 billion. In 1980 it will jump to 597 billion gallons per day, with industry using 394 billion; irrigation, 166 billion; and municipal, 37 billion.

It takes an ocean of water to maintain our jobs—1,400 gallons to produce a dollar's worth of steel; nearly 200 gallons for a dollar's worth of paper; 500 gallons to manufacture a yard of wool, and 320 gallons to make a ton of aluminum. Water quality and quantity requires careful planning and only clean water will do for most of our needs. So, the water supply must be protected to keep it clean or it must be treated each time it is used until it is clean.

The Water Quality Act of 1965 will, in my opinion, be a powerful legal tool in assisting the national effort toward proper water pollution control and increased purity in the water of our Nation's rivers, lakes, and streams.

Therefore, Mr. Chairman, I urge passage of the measure before us today. We must insure that pure water—so necessary to life—is available to our children and our children's children.

Mr. HORTON. Mr. Chairman, I rise in support of the pending legislation. S. 4 has my enthusiastic endorsement, and I shall vote for it.

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Water pollution is a serious national problem that deserves Federal attention and action. The steps we have taken so far to provide Government help to the States and local communities in combating polluting conditions have paid off handsomely.

Now, we can do even more. The formula for assistance in this measure promises to be a strong stimulant for other levels of Government to be powerful partners in the fight against pollution.

From my service on the Natural Resources and Power Subcommittee of the House Government Operations Committee, I am very much aware of the scope and extent of pollution problems in our

Nation. I have seen them first hand and heard from officials in various areas of the country on the positive controls that can be installed with the kind of Federal assistance proposed in S. 4.

I am particularly pleased at the assistance this legislation will make available to New York State, for my State is embarking on a very ambitious program to purify its water resources and assure their clean condition for the future. The New York pure waters program has been designed in complete harmony with the additions being made to Federal water pollution efforts as they are embodied by the bill before us today.

We can and will assure clean water for our Nation by further helping to build and operate up-to-date sewage treatment systems, by providing information and guidance to industries for their pollution-abating activities, and by better measuring water situations throughout the country in order that we know where action is needed.

I believe the public investment in pure water will be returned many times over in terms of better health, improved recreation, higher property values, lower water costs, and general economic expansion because our Nation will be a finer place to live, work and play.

Mr. Chairman, this legislation represents considerable assistance from the Federal Government to help our States and localities answer water pollution problems. It is the result of long and serious consideration and has a potential of protecting our Nation's water supply in a very positive fashion.

Therefore, I urge the House to give its overwhelming approval to the passage of this bill.

Mr. BLATNIK. Mr. Chairman, I have no further requests for time.

Mr. CRAMER. Mr. Chairman, I have no further requests for time.

The CHAIRMAN. Pursuant to the rule the Clerk will now read the substitute committee amendment printed in the reported bill as an original bill for the purpose of amendment.

The Clerk read as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) (1) section 1 of the Federal Water Pollution Control Act (33 U.S.C. 466) is amended by inserting after the words "SECTION 1." a new subsection (a) as follows:*

*"(a) The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution."*

*(2) Such section is further amended by redesignating subsections (a) and (b) thereof as (b) and (c), respectively.*

*(3) Subsection (b) of such section (as redesignated by paragraph (2) of this subsection) is amended by striking out the last sentence thereof and inserting in lieu of such sentence the following: "The Secretary of Health, Education, and Welfare (hereinafter in this Act called 'Secretary') shall administer this Act through the Administration created by section 2 of this Act, and with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him, shall supervise and direct (1) the head of such Administration in administering this Act and (2) the administration of all other functions of the Department of Health, Education, and Welfare related to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe."*

*(b) Section 2 of Reorganization Plan Numbered 1 of 1953, as made effective April 1, 1953, by Public Law 83-13, is amended by striking out "two" and inserting in lieu thereof "three"; and paragraph (17) of subsection (d) of section 303 of the Federal Executive Salary Act of 1964 is amended by striking out "(2)" and inserting in lieu thereof "(3)".*

Mr. BLATNIK (interrupting reading). Mr. Chairman, I ask unanimous consent that further reading of section 1 be dispensed with, and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

Mr. BLATNIK. Mr. Chairman, this covers the water pollution situation, and states the purpose, that is, Federal water pollution control is to enhance the quality and value of our water resources and establish a national policy for the prevention, control, and abatement of water

pollution.

The Clerk read as follows:

SEC. 2. (a) Such Act is further amended by redesignating sections 2 through 4, and references thereto, as sections 3 through 5, respectively, sections 5 through 14, as sections 7 through 16, respectively, by inserting after section 1 the following new section:

**"FEDERAL WATER POLLUTION CONTROL  
ADMINISTRATION"**

"SEC. 2. Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the 'Administration'). The head of the Administration shall be appointed, and his compensation fixed, by the Secretary. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from the personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge the Administration's functions and may for that purpose use funds available for carrying out such functions; and he may delegate any of his functions to, or otherwise authorize their performance by, any officer or employee of, or assigned or detailed to, the Administration."

(b) Subject to such requirements as the Civil Service Commission may prescribe, any commissioned officer of the Public Health Service who, on the day before the effective date of the establishment of the Federal Water Pollution Control Administration, was, as such officer, performing functions relating to the Federal Water Pollution Control Act may acquire competitive civil service status and be transferred to a classified position in the Administration if he so transfers within six months (or such further period as the Secretary of Health, Education, and Welfare may find necessary in individual cases) after such effective date. No commissioned officer of the Public Health Service may be transferred to the Administration under this section if he does not consent to such transfer. As used in this section, the term "transferring officer" means an officer transferred in accordance with this subsection.

(c) (1) The Secretary shall deposit in the Treasury of the United States to the credit of the civil service retirement and disability fund, on behalf of and to the credit of each transferring officer, an amount equal to that which such individual would be required to deposit in such fund to cover the years of service credited to him for purposes of his retirement as a commissioned officer of the Public Health Service to the date of his transfer as provided in subsection (b), but

only to the extent that such service is otherwise creditable under the Civil Service Retirement Act. The amount so required to be deposited with respect to any transferring officer shall be computed on the basis of the sum of his basic pay, allowance for quarters, and allowance for subsistence and, in the case of a medical officer, his special pay, during the years of service so creditable, including all such years after June 30, 1960.

(2) The deposits which the Secretary of Health, Education, and Welfare is required to make under this subsection with respect to any transferring officer shall be made within two years after the date of his transfer as provided in subsection (b), and the amounts due under this subsection shall include interest computed from the period of service credited to the date of payment in accordance with section 4(d) of the Civil Service Retirement Act (5 U.S.C. 2254(c)).

(d) All past service of a transferring officer as a commissioned officer of the Public Health Service shall be considered as civilian service for all purposes under the Civil Service Retirement Act, effective as of the date any such transferring officer acquires civil service status as an employee of the Federal Water Pollution Control Administration; however, no transferring officer may become entitled to benefits under both the Civil Service Retirement Act and title II of the Social Security Act based on service as such a commissioned officer performed after 1956, but the individual (or his survivors) may irrevocably elect to waive benefit credit for the service under one Act to secure credit under the other.

(e) A transferring officer on whose behalf a deposit is required to be made by subsection (c) and who, after transfer to a classified position in the Federal Water Pollution Control Administration under subsection (b), is separated from Federal service or transfers to a position not covered by the Civil Service Retirement Act, shall not be entitled, nor shall his survivors be entitled, to a refund of any amount deposited on his behalf in accordance with this section. In the event he transfers, after transfer under subsection (b), to a position covered by another Government staff retirement system under which credit is allowable for service with respect to which a deposit is required under subsection (c), no credit shall be allowed under the Civil Service Retirement Act with respect to such service.

(f) Each transferring officer who prior to January 1, 1957, was insured pursuant to the Federal Employees' Group Life Insurance Act of 1954, and who subsequently waived such insurance, shall be entitled to become insured under such Act upon his transfer to

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the Federal Water Pollution Control Admin-

istration regardless of age and insurability.

(g) Any commissioned officer of the Public Health Service who, pursuant to subsection

(b) of this section, is transferred to a position in the Federal Water Pollution Control Administration which is subject to the Classification Act of 1949, as amended, shall receive a salary rate of the General Schedule grade of such position which is nearest to but not less than the sum of (1) basic pay, quarters and subsistence allowances, and, in the case of a medical officer, special pay, to which he was entitled as a commissioned officer of the Public Health Service on the day immediately preceding his transfer, and (2) an amount equal to the equalization factor (as defined in this subsection), but in no event shall the rate so established exceed the maximum rate of such grade. As used in this section, the term "equalization factor" means an amount determined by the Secretary to be equal to the sum of (A) 6½ per centum of such basic pay and (B) the amount of Federal income tax which the transferring officer, had he remained a commissioned officer, would have been required to pay on such allowances for quarters and subsistence for the taxable year then current if they had not been tax free.

(h) A transferring officer who has had one or more years of commissioned service in the Public Health Service immediately prior to his transfer under subsection (b) shall, on the date of such transfer, be credited with thirteen days of sick leave.

(i) Notwithstanding the provisions of any other law, any commissioned officer of the United States Public Health Service with twenty-five or more years of service who has held the temporary rank of Assistant Surgeon General in the Division of Water Supply and Pollution Control of the United States Public Health Service for three or more years and whose position and duties are affected by this Act, may, with the approval of the President, voluntarily retire from the United States Public Health Service with the same retirement benefits that would accrue to him if he had held the rank of Assistant Surgeon General for a period of four years or more if he so retires within ninety days of the date of the establishment of the Federal Water Pollution Control Administration.

(j) Nothing contained in this section shall be construed to restrict or in any way limit the head of the Federal Water Pollution Control Administration in matters of organization or in otherwise carrying out his duties under section 2 of this Act as he deems appropriate to the discharge of the functions of such Administration.

(k) The Surgeon General shall be consulted by the head of the Administration on the public health aspects relating to water pollution over which the head of such Administration has administrative responsibility.

Mr. WRIGHT (interrupting reading of the bill). Mr. Chairman, I ask unanimous consent that section 2 be considered as having been read and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. WRIGHT. Mr. Chairman, this section provides for an upgraded status within the administrative structure for the water pollution control activities. Heretofore, the control of water pollution has been relegated to the very minor status of a division within a bureau of the Public Health Service within the Department of Health, Education, and Welfare. Certainly that is not a standing in keeping with or equal to the tasks or the importance of this activity. This section of the bill creates a Federal Water Pollution Control Administration. It will unify the three basic activities of research, enforcement, and assistance in one office. It consolidates the numerous scattered activities under one effective head. It will make compliance considerably easier, and make administration more effective.

#### AMENDMENTS OFFERED BY MR. BLATNIK

Mr. BLATNIK. Mr. Chairman, I have two amendments to offer, and I ask unanimous consent that they be considered en bloc.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

The Clerk read as follows:

Amendments offered by Mr. BLATNIK: Page 17, line 2, strike out "4(d)" and insert in lieu thereof "4(e)".

Page 17, line 3, strike out "2254(c)" and insert in lieu thereof "2254(e)".

The amendments were agreed to.

Mr. BLATNIK. Mr. Chairman, I have three correcting amendments to offer, and ask unanimous consent that they be considered en bloc.

The CHAIRMAN. Is there objection to the request of the gentleman from

Minnesota?

There was no objection.

The Clerk read as follows:

Amendments offered by Mr. BLATNIK: Page 21, line 23, strike out "1965," and insert in lieu thereof "1966,".

Page 21, line 25, strike out "purpose of making grants under" and insert in lieu thereof "purposes of".

Page 22, line 2, after "grant" insert "or contract."

The amendments were agreed to.

The Clerk read as follows:

SEC. 3. Such Act is further amended by inserting after the section redesignated as section 5 a new section as follows:

#### "GRANTS FOR RESEARCH AND DEVELOPMENT

"SEC. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith. The Secretary is authorized to provide for the conduct of research and demonstrations relating to new or improved methods of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes, except that not to exceed 25 per centum of the total amount appropriated under authority of this section for any fiscal year may be expended under authority of this sentence during such fiscal year.

"(b) Federal grants under this section shall be subject to the following limitations.

(1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary; (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both

storm water and sewage or other wastes.

"(c) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1965, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose of making grants under this section. Sums so appropriated shall remain available until expended. No grant shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year."

SEC. 4. (a) Clause (2) of subsection (b) of the section of the Federal Water Pollution Control Act herein redesignated as section 8 is amended by striking out "\$600,000," and inserting in lieu thereof "\$1,200,000."

(b) The second proviso is clause (2) of subsection (b) of such redesignated section 8 is amended by striking out "\$2,400,000," and inserting in lieu thereof "\$4,800,000."

(c) Subsection (b) of such redesignated section 8 is amended by adding at the end thereof the following: "The limitations of \$1,200,000 and \$4,800,000 imposed by clause (2) of this subsection shall not apply in the case of grants made under this section from funds allocated under the third sentence of subsection (c) of this section if the State agrees to match equally all Federal grants made from such allocation for projects in such State."

(d) (1) The second sentence of subsection (c) of such redesignated section 8 is amended by striking out "for any fiscal year" and inserting in lieu thereof "for each fiscal year ending on or before June 30, 1965, and the first \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965,".

(2) Subsection (c) of such redesignated section 8 is amended by inserting immediately after the period at the end of the second sentence thereof the following: "All sums in excess of \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States."

(3) The third sentence of subsection (c) of such redesignated section 8 is amended by striking out "the preceding sentence" and inserting in lieu thereof "the two preceding sentences."

(4) The next to the last sentence of subsection (c) of such redesignated section 8 is amended by striking out "and third" and inserting in lieu thereof ", third, and fourth".

(e) The last sentence of subsection (d) of such redesignated section 8 is amended to read as follows: "Sums so appropriated shall remain available until expended. At least 50 per centum of the funds so appropriated for each fiscal year ending on or before June

30, 1965, and at least 50 per centum of the first \$100,000,000 so appropriated for each fiscal year beginning on or after July 1, 1965, shall be used for grants for the construction of treatment works servicing municipalities of one hundred and twenty-five thousand population or under."

(f) Subsection (d) of such redesignated section 8 is amended by striking out "\$100,000,000 for the fiscal year ending June 30, 1965, and \$100,000,000 for the fiscal year ending June 30, 1967." and inserting in lieu

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thereof "\$150,000,000 for the fiscal year ending June 30, 1966, and \$150,000,000 for the fiscal year ending June 30, 1967."

(g) Subsection (f) of such redesignated section 8 is redesignated as subsection (g) thereof and is amended by adding at the end thereof the following new sentence: "The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c)."

(h) Such redesignated section 8 is further amended by inserting therein, immediately after subsection (e) thereof, the following new subsection:

"(f) Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 10 per centum of the amount of such grant for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan area. For the purposes of this subsection, the term 'metropolitan area' means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget, except as may be determined by the President as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and other activities, which in the opinion of the President lends

itself as being appropriate for the purposes hereof."

Mr. CRAMER. (interrupting the reading of the bill). Mr. Chairman, I ask unanimous consent that this section be considered as read and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Florida?

There was no objection.

Mr. McCARTHY. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, two beleaguered contingents—one Federal and one local—have been waging a valiant war on water pollution.

But, we seem to be losing the war. Lake Erie, whose waters stretch for 20 miles in my district, soon will die if drastic steps are not taken promptly.

Reinforcements are needed. A third army must be recruited now. We need the States in this all-out battle.

In this bill, for the first time, the States are offered a real incentive to join in.

They are offered an incentive to help their larger cities shoulder the burden of this costly war.

Pollution, obviously, occurs where there are people. So the larger cities are the larger polluters.

But, until now, the \$600,000 ceiling on a single project looked awkwardly, even impossibly low to the burgeoning municipalities.

Six hundred thousand dollars does not look like much to a fiscally strapped city that is faced with the need for a \$10 million waste treatment plant and sees no hope of State aid.

The enemy—pollution—looks pretty ghastly, grim and growing to such a beleaguered city.

Responding to the plight of the cities, the committee has proposed that an additional \$50 million be added to the original \$50 million, a year program.

We propose that the new money be allocated to the States on a strict population basis and that the ceiling on Federal participation be raised to let the larger

cities in. That it be lifted to a full 30 percent of the total cost of a waste treatment plant regardless of the total amount involved, provided that the State match dollar for dollar, all moneys allocated from the additional \$50 million.

My State of New York has indicated that it would join the fight on this 30-30-40 basis—30 Federal, 30 State, 40 local. Other States would surely join in too.

This would offer new hope and help to those cities that previously faced a plight, like the city I mentioned, with the prospect of financing 94 percent of a \$10 million waste treatment plant.

Under this new formula, this city could look to the State for \$3 million, to the Federal Government for \$3 million and would have to finance only \$4 million, or 40 percent, locally.

Most important, by keeping this provision intact, we will be recruiting a new contingent—the States—into a new, three-pronged attack on water pollution.

We will lighten the financial load on all governments, hasten a victory over pollution and a cleanup of the Nation's waters.

But other forces, by way of other legislation and White House action, will have to join in if a total victory is to be gained.

Industries, many of whom have been draft-dodgers to date, must be pressed into the service with the carrot of tax incentives for extensive pollution abatement equipment and the stick of strict enforcement.

Our good neighbor Canada should be invited to join either through a new treaty or the existing international joint commission.

In a joint attack, Canada and the United States should eliminate municipal and industrial pollution from the Great Lakes, dredge vast quantities of algae from lake bottoms and finally, channel a new water supply from Hudson's Bay into the lakes to flush out pollutants, raise lake levels and provide for increased United States and Canadian water needs.

Much remains to be done. We must progressively escalate this war if we are to be victorious.

This bill today is a must.

As a Member of this body, as an American, a Buffalonian, a lover of Lake Erie, the Niagara River and all our lakes, streams, and rivers, I fervently hope you will vote for it.

Mr. STRATTON. Mr. Chairman, will the gentleman yield?

Mr. McCARTHY. I yield to the gentleman from New York.

Mr. STRATTON. I wonder if the gentleman from New York would tell me whether that means of the \$150 million authorized here, the \$50 million would be earmarked, so to speak, for the larger cities and the \$100 million would be earmarked for the smaller cities.

Mr. McCARTHY. Partially that would be the effect, because the additional \$50 million that we are discussing here now would be allocated on a strictly population basis, so that the larger States where the largest cities are would get more money proportionately. However, the smaller States would draw on that \$50 million also.

Mr. STRATTON. I hope that that interpretation will be clear in the record because while I recognize the problem of the larger cities, I am fearful if we raise the ceiling too high all the money might go to the largest cities, and we who represent the smaller communities might end up with very little in our areas.

If that \$50 million is in a sense earmarked for cities, then we representing smaller communities can be sure that our communities still have something to help them out.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. McCARTHY. I yield to the gentleman.

Mr. BLATNIK. The gentleman from New York [Mr. McCARTHY], a member of the committee, has answered the question and clarified the question raised by the gentleman from New York [Mr.

STRATTON]. We completely protect and do not at all change the position, and the justifiable position of priorities to small communities. On that initial \$100 million authorization, half of that will be reserved. The priorities given to the \$125,000 is as it now exists and has existed for these years under current law. The additional \$50 million can be used in short by the States as they will. If their problem is as to small municipalities, they may emphasize aid in that direction for small municipalities. In other areas where we have huge metropolitan areas with their problems, then that money may be used to exceed the limit for the larger cities that equally need this. So we have a more flexible and more effective two-pronged program and at the same time encouraging and urging and hoping that the States will match on this additional \$50 million—match their share prorated on a population basis dollar for dollar and they may, therefore, be permitted to exceed the limit. So we do adequately without question protect smaller communities and interests and for the first time also give an opportunity to assist the larger municipalities.

Mr. McCARTHY. I thank the distinguished chairman. I might add that one of the important effects of this, and I am sure the gentleman would agree, is that for the first time there is offered a real incentive to the States to come into this program. Up until now the Federal Government and the localities have been fighting a rather beleaguered war on

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pollution. They need reinforcements and this will bring the States in by offering an inducement.

Mr. HALLECK. Mr. Chairman, will the gentleman yield?

Mr. McCARTHY. I yield to the distinguished gentleman from Indiana.

Mr. HALLECK. I just want to say as one of the newer members of this committee, it has been a pleasure for me to work on the committee in drafting this

legislation. I think the committee approached the whole matter with fairness and a desire to do the right thing on both sides of the aisle, and I am happy to lend my support on the passage of this bill.

Mr. McCARTHY. I thank the gentleman from Indiana.

The CHAIRMAN. The time of the gentleman has expired.

AMENDMENT OFFERED BY MR. CLEVELAND

Mr. CLEVELAND. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. CLEVELAND: Page 24, line 8, strike out "(g)" and insert in lieu thereof "(h)".

Page 24, line 18, strike out "subsection" and insert in lieu thereof "subsections".

Page 25, line 18, strike out the quotation marks.

Page 25, after line 18, insert the following: "(g) Notwithstanding any other provision of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 15 per centum of the amount of the total project cost if (1) the project for which the grant is made is for the service of a municipality located within an 'eligible area' as that term is defined in section 3(a) of the Public Works Acceleration Act (76 Stat. 541), and (2) such municipality is located outside the 'Appalachian region, as that term is defined in section 403 of the Appalachian Regional Development Act of 1965 (Public Law 39-4) and (3) the State or States in which such municipality is located pay toward the cost of such project an amount equal to the Federal contribution to such project authorized by subsection (b) of this section."

Mr. CLEVELAND. Mr. Chairman, I will try to explain this amendment briefly. The amendment was offered in committee but the committee did not adopt it.

The general purpose of this amendment is to recognize the fact that in some areas of the Nation, particularly those in the so-called deprived or disadvantaged areas, that even with 30 percent Federal help and even with 30 percent matching State funds, such as we have in New Hampshire, the remaining 40 percent is still beyond the reach of many of these small communities. This is

particularly true of towns near or on the headwaters of some of the rivers that contribute to the pollution, which sometimes carries downstream and so affects the other communities far down the river.

The Committee on Public Works has recognized the fact that some of these rural communities cannot afford to participate with the matching funds necessary for sewage plants.

A remedy was provided in the Appalachian bill where up to 80 percent of the participating funds will be supplied by the Federal Government.

It seems only fair that in those rural towns—particularly those in depressed, distressed, or disadvantaged areas—there be an additional helping hand from the Federal Government, in recognition of the fact that even if they try their utmost they cannot afford to match these funds.

With this thought I offer the amendment.

Mr. BLATNIK. Mr. Chairman, I rise in opposition to the amendment. At the same time I wish to make it clear I am in sympathy with the objectives of giving additional financial help to municipalities which have such a need.

This is not the place to do so. It would upset the standard, which is consistent and uniform, in a very progressive matching formula.

We are hopeful that the addition of the \$50 million will induce the States to act. We expect to match the 30 percent, leaving only 40 percent to be provided, and that will be of assistance.

Above all, there is legislation pending before our committee designed to give assistance to areas where municipalities, counties, and governmental subdivisions are in financial need. There is a substantial community facilities section, and I believe some of the communities to which the gentleman refers could benefit and could be assisted.

I am sympathetic to the objective, but this is not the place to take action. I ask that the amendment be defeated.



Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman from Florida.

Mr. CRAMER. I hesitate to oppose an amendment offered by the distinguished gentleman from New Hampshire, but I should like to ask a question.

An additional 15 percent is being proposed by the amendment, but there is no authorization increase to take care of the additional money in the amendment, so therefore would it not have to come out of the existing program which the legislation would authorize? In other words, the effect would be to permit a diversion of substantial funds to the additional "15 percent area."

Mr. BLATNIK. Yes.

Mr. CRAMER. Without increasing the authorization in the bill itself?

Mr. BLATNIK. That is correct.

Mr. CRAMER. This would have the effect of diverting funds from the authorizations proposed, as voted by the committee?

Mr. BLATNIK. That is correct.

Mr. CRAMER. From other communities which would otherwise qualify?

Mr. BLATNIK. That is correct.

Mr. CRAMER. I suggest to the gentleman that the question of depressed area legislation, as the gentleman from Minnesota said, will be considered by our committee. I believe that would be a better place for consideration of this proposal, although I hasten to say I doubt if I will be in support of that legislation when it is considered.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New Hampshire [Mr. CLEVELAND].

The amendment was rejected.

Mr. SCHMIDHAUSER. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, I rise at this moment to give my strong support to this excellent legislation. I should like to underscore certain provisions in it which are of exceptional value to us in the Midwest.

I have just returned from an exhaustive observation of the Mississippi River region of my congressional district. My trip vividly impressed upon me the urgency and imperative need for passage of the strong water pollution control bill which the House of Representatives is currently considering. The Mississippi River is now overflowing its banks and spreading over rich farmland, homes, factories, and areas along the river.

But the most serious aspect of the present flooding conditions is the flow of raw sewage directly into the Mississippi River. In many of the communities along the Mississippi, the water has backed up into the sewerage systems and put them out of operation, thus causing the free flow of raw sewage waste into the river. This situation not only is increasing the polluted state of the river, but has resulted in raw sewage being deposited over vast areas of the Upper Mississippi River Basin. City water resources and individual wells have been contaminated and residents are faced with the prospect of a serious shortage of pure water. In short, a serious public health hazard has been created because of the inadequate ability of the existing disposal plants to cope with floodwaters.

My on-the-spot observations underscore the urgent need for this bill which contains a provision for coping with the existing public health hazard. We cannot continue to jeopardize the health and safety of our citizens who are in dire need of assistance for their efforts to cope with the serious problem resulting from the free flow of raw sewage into their homes and water. In the Quad City area, including Davenport and Bettendorf in my district, the sewage of 100,000 people is flowing directly into the river. This bill will help guard against future disasters in all parts of the Nation.

The Water Quality Act of 1965 will strengthen and broaden the national program of prevention, control, and abatement of water pollution. The

progress that has been made under the Federal Water Pollution Control Act of 1956 and the amendments of 1961, in controlling and abating pollution makes it apparent that the goal of clean water can be achieved. Due largely to the untiring efforts of JOHN BLATNIK, of Minnesota, we have the opportunity today to vote on the Water Quality Act of 1965, which I believe will expand the water pollution control program and greatly accelerate the rate of progress toward clean water throughout the Nation.

This act provides for the creation of the Federal Water Pollution Control Administration. As water pollution control has taken on greater national significance through the past few years, it is now essential that the administration of this program be given the necessary

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identity and status to perform its functions.

The section of the Water Quality Act of 1965 which I believe is particularly significant in the progressive fight against water pollution, is that which establishes a research and development program relating to combined sewers.

A great many cities in our country installed combined sewers at the time their sewer systems were constructed. Generally, these sewers are large enough to take not only the domestic sewage from the areas they serve, but also the water that runs off after a rainfall. Following a rain these sewers carry quantities of water which are frequently so great that it is not feasible to treat the water at any standard type of sewage treatment plant. And so, during periods of unusually high flow the excess water, including the domestic wastes carried with the water, is allowed to overflow directly to the receiving stream. Although the storm water provides some dilution of the domestic wastes, the heavy flows of storm water serve to flush out the accumulated organic material in the sewers, which increases the pollution of storm water overflows.

A recent study by the Department of Health, Education, and Welfare, on storm water overflows and combined sewer systems, showed that at least 59 million people in more than 1,900 communities are served by sewer systems which allow overflows. The annual average overflow is estimated to contain 3 to 5 percent of the untreated sewage and, during storms, the overflow contains as much as 95 percent of untreated sewage.

These discharges of untreated sewage adversely affect all known water uses, and significant economic loss results from the damages caused by these discharges.

There can be no question that something must be done about these discharges, but the question is what can be done.

The one method which we know will correct the problem is the complete separation of storm and sanitary sewers. With this method the domestic wastes would not be combined with the storm waters and would receive the treatment normally provided, at all times. This solution is technically sound, but financially impossible for most areas. Roughly, it would cost from \$20 to \$30 billion to achieve complete separation of sewers throughout the country. It is not hard to imagine why most cities find the cost of separating their sewers prohibitive.

Separating sewers involves not only spending huge amounts of money, but also involves disrupting normal life of a community. In order to separate sewers the streets must be torn up to lay the new pipes, thus streets must at times be closed to traffic and this can cause huge bottlenecks in rush-hour traffic. The merchants on the streets closed to traffic suffer great economic losses, as well. And, of course, the noise and dirt resulting from tearing up the streets are unpleasant to all.

Other methods of dealing with the problem of discharges from combined sewers have been proposed, but most of

them are, as yet untried. These methods include partial separation of sanitary and storm sewers and other contributing sources, expanded or new treatment facilities, holding tanks with or without chlorination, disinfection, storage using lagoons, lakes, quarries, and other depressions, storage using guttering, streets and roadways, and inlets, additional sewer capacity, regulation and control of flow through the sewer system, and improved planning and zoning.

Up to this time these methods have not been studied because there are very few of such installations to study. And yet, to solve the critical problem of noxious discharges from combined sewers these new methods must be studied and evaluated.

The Water Quality Act of 1965, by providing grants to assist in the development of projects to find new or better methods of controlling discharges from combined sewers, is a great step toward the solution of this problem.

The expenditure of \$20 million per year for the next 4 years, for research which can develop practical methods of controlling combined sewage wastes, is well justified when compared to the billions of dollars that otherwise would of necessity be spent to install separate sewer systems in cities throughout the country.

Although grants for research and development are a vital part of the water pollution control program, grants for construction of waste treatment facilities are also an important part of the total program. At present, grants under provisions of the Federal Water Pollution Control Act give the greatest benefit to small cities where the Federal grants frequently cover 30 percent of the construction costs. As the act allows grants up to 30 percent of the costs or \$600,000, whichever is the smaller, large cities find that the Federal grants cover only a small portion of their total costs.

The Water Quality Act of 1965 provides for an increase in dollar limitations on treatment works construction. This

increase will give the larger cities, with their proportionately greater treatment needs and expenditures, grants for a more equitable portion of their construction costs.

The procedures in the enforcement section of the Federal Water Pollution Control Act have been proven effective in the number of enforcement actions which have been taken. I am pleased to note that there are only two changes in this section, and both broaden the scope of the Secretary's authority in carrying out the enforcement provisions of this act.

The first change empowers the Secretary of Health, Education, and Welfare, to call a conference if he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution and action of Federal, State, or local authorities. Up to this time the Secretary has not had the authority to initiate action in such situations. This provision will enable the Secretary to take enforcement action where necessary, to deal with these problems.

The second change in the enforcement measures permits the issuance of subpoenas at the hearing stage of enforcement procedures to compel the presence and testimony of witnesses, and the production of any evidence that relates to any matter under investigation. Although hearings have been necessary in only 4 out of the 34 enforcement actions it is essential that when a hearing is required the Federal authorities have the power to obtain the information which will make the hearing an effective and productive procedure.

I am convinced that this bill before us today is a major step forward in the fight against water pollution. In this fight we cannot take a moment's rest, for as every day passes millions and millions of gallons of water containing domestic sewage and industrial wastes of every sort, are poured into our streams increasing the already intolerable pollution load.

The CHAIRMAN. The Clerk will read.

The Clerk read as follows:

SEC. 5. (a) Subsection (f) of the section of the Federal Water Pollution Control Act herein redesignated as section 7 is amended by striking out "and" at the end of clause (5) and by inserting at the end of such subsection the following:

"(7) provides that the State will file with the Secretary a letter of intent that such State will establish on or before June 30, 1967, water quality criteria applicable to interstate waters and portions thereof within such State, and no State shall receive any funds under this Act after ninety days following the date of enactment of this clause until such a letter is so filed with the Secretary."

(b) Paragraph (1) of subsection (c) of the section of the Federal Water Pollution Control Act herein redesignated as section 10 is amended by striking out the final period after the third sentence of such subsection and inserting the following in lieu thereof. "or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities"

(c) Subsection (e) of such redesignated section 10 of the Federal Water Pollution Control Act is amended by inserting immediately after the period at the end of the third sentence thereof the following. "In connection with any such hearing, the Secretary or his designee shall have power to administer oaths and to compel the presence and testimony of witnesses and the production of any evidence that relates to any matter under investigation at such hearing, by the issuance of subpoenas. No person shall be required under this subsection to divulge trade secrets or secret processes. Witnesses so subpoenaed shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States. In case of contumacy by, or refusal to obey a subpoena duly served upon, any person, any district court of the United States for the judicial district in which such person charged with contumacy or refusal to obey is found or resides or transacts business, upon application by the Secretary or the Attorney General, shall have jurisdiction to issue an order requiring such person to appear and give testimony, or to appear and produce evidence, or both. Any failure to obey such order of the court may be punished by the court as contempt thereof."

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Mr. THOMPSON of Louisiana (inter-

rupting the reading). Mr. Chairman, I ask unanimous consent that section 5 be considered as read.

The CHAIRMAN. Is there objection to the request of the gentleman from Louisiana?

There was no objection.

Mr. THOMPSON of Louisiana. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman and gentlemen of this body, I believe that probably the part of this legislation as it was reported from the Senate which caused the greatest amount of concern was the part wherein the Federal Government would be authorized to promulgate water standards nationally.

After long deliberation in many hearings, as has been brought out here today, it was determined, after many, many meetings, that it was the consensus of the various States and, in fact, in nearly all instances where States were heard through their Governors or representatives, that they would prefer to work out their own problems settling what the criteria of water standards should be. We know that no two streams have the same personality, so to speak.

No two interstate streams have the same problems. Some pollution is caused by industry, other pollution by natural causes, other pollution by agriculture, and other by the communities located on the streams. Nevertheless all of it is pollution. In most cases we believe that the States should solve their own problems if they can. We feel that the Federal Government should not—and the committee agreed to this unanimously—attempt to step in and set water standards unless and until we can prove conclusively that the several States cannot do it for themselves.

In having this entire matter considered in this package type of legislation we have created a great incentive for the States to cooperate in solving a common problem and yet allow them to retain their privileges and prerogatives.

The legislation provides that by simply

filing a letter of intent within 90 days after the passage of this legislation the States will be able to go on with their surveys for the establishment of water criteria to the point where reports will be available to Congress by June 30, 1967, at which time most of this legislation will have expired and when the Congress will be able to take another look at it. Those States which do not conform to this privilege and duty that is being given to them will, of course, not be allowed to receive their new grants.

We agreed to this, as I say, unanimously in the committee, and I am quite sure that the other body will see our point of view because it is one of the parts of the bill which was considered the longest and given the greatest deliberation by the experts, scientists, engineers, and our own legal and engineering staff on the committee. I hope there will be no amendment offered to this.

Mr. BLATNIK. Mr. Chairman, I move to strike out the requisite number of words.

Mr. Chairman, our personal friend and able colleague, Congressman JOHN DINGELL of Michigan, has been in the forefront of conservation measures, particularly with regard to water pollution control legislation, from the very inception of it. Mr. DINGELL has done a tremendous job and has given valuable assistance to me personally and to many of us who are interested in effective legislation in this field.

Mr. Chairman, I ask unanimous consent that the remarks of the Hon. JOHN DINGELL appear at this point in the RECORD.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota.

There was no objection.

Mr. DINGELL. Mr. Chairman, water is the lifeblood of every society. Without an adequate supply, history shows us, mighty nations crumble and once great peoples become the academic subjects of archeological diggings and

scholarly dissertations.

Often, areas have been deprived of water due to changes in climatic conditions, changes over which primitive peoples and even advanced cultures have little control. While such deprivation is lamentable, at least man can console himself with the truth that the causes of his downfall are forces of nature beyond his power to affect.

We in America are confronted with a situation far more tragic. By polluting and defiling the sources of our water supply, we are thoughtlessly sowing the seeds of our own destruction. No acts of God are involved here, only the self-seeking shortsightedness of a prosperous nation.

Hence, it is imperative that we pause a moment amidst these days of unparalleled social and economic progress to take stock of this precious resource, the depletion of which would threaten our very survival, much less our struggle to build a better America.

The facts on water pollution are clear and frightening. As a nation, we receive about 1,200 billion gallons of water a day, about half of which is potentially usable. Current demand runs about 320 billion gallons daily, though only 315 billion gallons are available from running water and storage.

To make matters worse, water use is increasing at an accelerating rate. Since the turn of the century our population has tripled, but our fresh-water consumption has expanded eightfold from 40 billion gallons to the present level of 320 billion gallons a day. By 1980 water demand in America will have climbed to 600 billion gallons a day, about twice the present usage and equal to our total dependable supply.

Water reusage represents a partial solution to this crisis. The next time you turn on the faucet in your home, you will probably be reusing water utilized earlier by some upstream neighbor. In this sense we have not departed from the practices of ancient Rome, where water pipes bore the inscription:

The water you drink may have quenched Caesar's thirst.

In 1980, when our population will be in excess of 200 million, the water of most of our streams will have to be reused six or eight times.

Reusage will only enable us to escape our demand-supply water predicament, however, if the more serious problem of pollution is solved. Since 1900, the municipal-waste pollution load discharged into the Nation's waters has increased from 24 million people to 75 million. This will grow to 84 million in the next decade and to 150 million by 1980 unless strong measures are taken.

The pollution load from industrial wastes has soared from the equivalent untreated sewage of 15 million persons to 150 million persons since 1900. There have been enormous increases in pollution by new and highly toxic chemicals. Unless industry faces up to its responsibility to control its contamination of our waters, its contribution will be equivalent to the waste of 300 million persons by 1970 and no one knows how many by the year 2000.

More than 100 million Americans get their drinking water today from rivers carrying sewage, industrial wastes, and anything else that can be flushed down a sewer or thrown from a bridge. The same municipalities and industries that need more clean water are soiling and defiling their own water supplies and those of their neighbors.

A partial list of the things we dump into our waters includes: untreated municipal sewage; manufacturing wastes; oxygen-absorbing chemicals; fish and animal matter; germs and viruses of a thousand varieties, including dysentery, cholera, infectious hepatitis, and probably polio; and radioactive wastes in small but increasingly dangerous doses.

Having surveyed the facts of the matter, what are the results of this failure to conserve our limited water resources? Most obviously, we are fast approaching the day when we will experience acute shortages of healthful water for drink-

ing, cleaning, and washing.

It requires 770 gallons of water to refine 1 barrel—42 gallons—of petroleum, 50,000 gallons to test an airplane engine, 65,000 to produce 1 ton of steel, 320,000 gallons to produce 1 ton of aluminum, and 600,000 gallons to make 1 ton of synthetic rubber. Clearly, if something is not done, our industries will soon be constrained by inadequate supplies of water.

Esthetically, we can already witness the scars of pollutions. Our rivers and lakes were once clear, swift, and teeming with game fish. Today many of them lie sluggish, shallow, clogged with municipal and industrial wastes, and unable to sustain wildlife of any sort.

Commercial fishing industries and sport fishing on many of our inland rivers once known for their high yield of delicious fish have vanished, because the fish have been poisoned and suffocated or because they are so contaminated as to be ill smelling, evil tasting and often unsafe.

But what is to be done? Public Health Service experts estimate that the construction of 4,000 new sewage treatment plants and the modernization of 1,700 more are needed to handle the present load of municipal sewage dumped into the Nation's rivers and streams. It is

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further estimated that it will require \$4.6 billion if municipalities are to catch up with treatment needs by 1968; \$1.9 billion to eliminate the backlog, \$1.8 billion to provide for population growth, and \$900 million to replace obsolete plants.

What is more, the problem is not a local or even a regional one, but plagues every part of the Nation. Looking at the Midwest from where I come, one is struck by the shameful spectacle of once beautiful Lake Erie dying a premature death due to pollution. Thoughtless pollution has rendered the lake's periphery a bleak wasteland, unfit for residence, recreation, or even industry.

Turning closer to my district in Michigan, one sees the sullied waters of the busy Detroit River, no longer fit even for swimming or fishing.

Industries discharge 1 billion gallons of waste into the Detroit River each day and municipalities discharge 540 million gallons of sewage. The river has changed from what was once a clean body of water at its head to a polluted body in its lower regions. The pollution is bacteriological, chemical, physical and biological, and this pollution will become progressively worse unless effective remedial action is taken at once.

The pollution of the Detroit River causes interference with municipal water supplies, recreation, fish and wildlife propagation, and navigation. It makes all forms of water contact sports in the lower Detroit River a distinct hazard.

Industries and municipalities discharge 6 million pounds of waste products into the Detroit River every day. At my urging in 1962, then Governor John B. Swainson of Michigan requested Federal enforcement officials to provide a solution to Detroit River pollution. The study undertaken after the 1962 conference has been concluded, and study recommendations are expected to provide an appropriate basis for remedial action to be taken in abatement of the pollution problem.

Concerned citizens elsewhere ask why little or nothing is being done to abate pollution. The responsibility for most abatement activity rests at State and local levels. Yet, due to weak antipollution laws and the unending efforts of industrial lobbyists, little progress has been recorded. Whenever Federal legislation is proposed to meet the problem, it is opposed on the grounds that it is an invasion of States rights.

A questionnaire sent out a few years ago by the chairman of the Public Works Committee of the House revealed that many States had never initiated their first proceedings under their respective water pollution laws. Others had never obtained a conviction because of gaps

in laws and because of judicial and administrative indifference. Billion dollar corporations have been fined \$25 for major water pollution. Some States have no agency authorized to administer State water pollution laws and one State which did have an administrative body to abate pollution found on one occasion that the legislature cut off its funds when it began to get too hard on a politically potent polluter. Industries often threaten to move out of a State if pollution control is enforced too rigorously, and States hungry for jobs and industry are prone to look the other way.

It was against this background of a growing national pollution crisis and State inability to act that Congress began, 17 years ago, to consider Federal legislation.

In 1948 Congress authorized the Surgeon General to assist and encourage State studies and programs to prevent and abate pollution of interstate waters, including the enactment of uniform State pollution control laws and adoption of interstate pollution contracts. It directed the Justice Department, with State consent, to institute court actions to require an individual or firm to cease practices causing pollution, and it created a Water Pollution Control Board.

In 1956 Congress increased the Surgeon General's initiative and powers. In 1961 Congress transferred Federal authority to the Secretary of Health, Education, and Welfare, expanded Federal abatement authority to cover intrastate and coastal waters, and permitted the Secretary to bring court actions through the Justice Department without first seeking State permission.

The present House bill will establish a Federal Water Pollution Control Administration within the Department of Health, Education, and Welfare. It will require States to promise within 90 days to establish water quality criteria for interstate waters by June 30, 1967, if they wish to qualify for Federal aid in the construction of water treatment facilities.

This latter provision replaces a Senate proposal to authorize the Secretary of Health, Education, and Welfare to establish and enforce water quality standards. The House bill provision looks in the right direction, but it does not go far enough and in my opinion it will not solve the problem. I was one of the first Members of Congress to introduce legislation to authorize Federal water quality standards, and I hope to see the conference committee on this bill adopt the Senate plan.

Water quality standards are an essential tool which should be afforded to the Secretary of Health, Education, and Welfare to begin a cleanup of our rivers and streams through effective preventive regulation. It enables the Federal Government, rather than seeking to restore streams, rivers and lakes which have been dreadfully abused, polluted and contaminated by the dumping of industrial wastes, to prevent abuse, pollution and contamination. The water quality standards in the Senate bill, and in my bills, H.R. 983 and H.R. 4482, as originally introduced, were meant to be a program for a continuing upgrading of our water to the highest level possible. Had this provision been enforced for 10 years, the Ohio newspaper would not be complaining about filth and sludgy accumulation in Lake Erie at the rate of 6 inches a year, and President Johnson would not be pointing out in his message the fact that 25 percent of Lake Erie is an ecological desert incapable of supporting fish or wildlife or serving as a recreational area in our growing America.

No single provision of the legislation, both that already approved by the Senate and the companion House measure, H.R. 3988, sponsored by the gentleman from Minnesota [Mr. BLATNIK] and my own bill, H.R. 4482, was open to more deliberate and flagrant misinterpretation than the proposed authority for setting of Federal water quality standards on interstate streams. This provision was given the endorsement of President

Johnson in his message on natural beauty and accordingly supported by the administration and conservation and citizen interests as necessary in order to prevent pollution before it happens. It is more than particularly shocking, therefore, to learn that Secretary of Agriculture Freeman, on his own admission before another committee of the House, has interposed himself in opposition to this significant provision. Were his opposition based on fact, I would be the first to admire and applaud him. However, the analysis of this provision, which he submitted as the basis for his position, is wholly and totally lacking as to any real understanding or appreciation of the very language of this section. It is difficult in the extreme to even try to understand how this department head could regard the language of the bill as excluding the important water use interests which he represents from any voice in the preparation of the standards. What, if anything, is more clear and intelligible than the bill's wording that the Secretary of Health, Education, and Welfare would prepare regulations setting forth the standards "in consultation with the Secretary of the Interior and with other Federal agencies"? If he wished to have the identical specificity accorded to the Secretary of the Interior by inclusion of himself in the bill, why did not he say so? Instead, he pleads that the legislation slipped through his entire Department unnoticed, despite the fact that the same identical provisions received Senate approval in the previous Congress and renewed administration endorsement in this session. What is worse is to find in his analysis a key to his opposition in regard to "permits for waste disposal from Federal installations" which is not and has not been in any way included in S. 4 of the House companion measures. If, as I suspect, his analysis was prepared by legislative experts within his Department, I recommend that he do himself and his agency a distinct service by some swift firing, and, unless he learns to bet-



ter support his administration, perhaps by a resignation.

As coauthor of this legislation I want to make another important point. This legislation in setting up an administration of water pollution control is not aimed at transferring the entire personnel now serving on water pollution in the Public Health Service. Its personnel have an important purpose to carry out in the Public Health Service. They have been tried in connection with the handling of water pollution and in frequent cases have been found wanting.

As I pointed out in my testimony before the House Public Works Committee, progress in water pollution control under State administration and under the

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Public Health Service is moving, but is moving determinedly the wrong way. An increasing number of streams, utilities, municipal water supplies, and waters for fish and wildlife and for recreational purposes are defiled and destroyed each year.

My testimony stated in part:

When I testified before this committee more than 14 months ago, I had in my possession a list of 90 serious cases of interstate pollution on which no Federal enforcement action had been initiated. This list had been made available to me by the Secretary (of HEW) himself. Several days ago I again requested a list of polluted rivers on which no Federal action had been taken, and this time I was proffered a list of 89 rivers. While less than overjoyed at the prospects of saving the Nation's waters at the aggregate advance rate of one river per annum, further investigation revealed that even this pathetic measure of progress was delusory. In fact, the list of 89 rivers actually included 102 waterways. Rivers that had been recorded separately on the first list were, for some reason, combined under one heading on the second list.

Of the 90 rivers that had appeared on the list more than a year ago, 33 had received Federal attention during 1964, while 57 had received none. In addition, 45 rivers on which no Federal action had been taken became seriously enough polluted to demand inclusion on the present list. Thus, after yet another year with the pollution program under the dead hand of the Public Health Service, and \$100 million later, we have fallen

12 rivers deeper on the debit side. Let no one accuse our pollution program of stagnating, it is moving quite determinedly in the wrong direction.

I do, however, pay richly deserved tribute to some of the highly capable people in the Public Health Service—like Mr. Murray Stein, who certainly is deserving of enthusiastic acclaim for his splendid work in this field, and many others in that agency.

In other respects I favor this House bill. For example, it authorizes the HEW Secretary to subpoena necessary witnesses to water pollution control hearings.

Concurrently with steady progress toward uniform and effective control over water pollution, Congress has provided increasingly generous Federal aid for the construction of sewage treatment facilities. The present bill will authorize Federal grants up to \$150 million a year for 1966 and 1967.

Also in this bill Congress recognizes the advantages of large treatment plants by encouraging small communities to undertake joint projects, and raising the cost ceilings to \$1.2 million for single and \$4.8 million for joint installations. It also recognizes a special problem by authorizing research into the control of raw sewage overflows from combined storm and sanitary sewers.

As one of the earliest advocates of clean water for Americans, I urge Members of the House to vote for this bill and to support the adoption in the conference committee of the Federal water quality standards provision.

The CHAIRMAN. The Clerk will read.

The Clerk read as follows:

SEC 6 The section of the Federal Water Pollution Control Act hereinbefore redesignated as section 12 is amended by adding at the end thereof the following new subsections

"(d) Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which

such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

"(e) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act."

SEC. 7. (a) Section 7(f) (6) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out "section 6(b) (4)." as contained therein and inserting in lieu thereof "section 8(b) (4); and".

(b) Section 8 of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out "section 5" as contained therein and inserting in lieu thereof "section 7".

(c) Section 11 of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by striking out "section 8(c) (3)" as contained therein and inserting in lieu thereof "section 10(c) (3)" and by striking out "section 8(e)" and inserting in lieu thereof "section 10(e)".

SEC. 8. This Act may be cited as the "Water Quality Act of 1965."

Mr. BLATNIK (interrupting the reading of the bill). Mr. Chairman, these last two brief sections are primarily technical and for the purpose of enumerating and identifying certain portions of the bill. I ask unanimous consent that sections 7 and 8 be considered as read and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Minnesota?

There was no objection.

#### AMENDMENT OFFERED BY MR. STRATTON

Mr. STRATTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. STRATTON: Page 28, after line 21, insert the following:

"SEC. 8. Section 13(c) of the Federal Water Pollution Control Act, as that section is redesignated by this Act, is amended by deleting the period at the end thereof, inserting a comma, and adding the following: 'and such lateral and other connecting sewer lines as the Secretary shall determine are

necessary to a particular project.'" And on line 22, strike out "8" and insert "9".

Mr. STRATTON. Mr. Chairman, I support this program. I have supported it in the past, back in 1961 when we did not have quite as unanimous support for it as we have today; and I support it today. It is a program that is vitally needed. But I would like to underline—and that is the purpose primarily of the amendment I am offering here—the peculiar problem that is being faced in the smaller communities, in the suburban areas, in the resort areas where all the recent growth has been taking place. I am not sure that this problem has been fully recognized in drafting this legislation.

And like the gentleman from New Hampshire [Mr. CLEVELAND], I, too, have an amendment which I think is addressed to that need.

I never quite realized just how much of a problem sewer lines pose for the rural and suburban areas of the country, until 2 years ago when we had the accelerated public works program in operation, with the Federal Government coming up with 50 percent help on local projects, assisting in the construction of needed water and sewer lines to provide for new divisions and subdivisions and new resort cottages. I realized then what a tremendous lack there was and what a tremendous need there was in our upstate, rural areas.

There are many communities I found, Mr. Chairman, where a sewer treatment plant exists but where effective sewage disposal is not being done because of the fact that many new areas are still not connected with the treatment plant and they need these new lines for the program to be effective.

My amendment is simply an amendment to the definition section of the act which defines the term "treatment works." In the present legislation treatment works are defined to include not only the actual sewage plant itself but also the necessary intercepting sewers, the outfall sewers, the pumping and

other equipment and "extensions, improvements, remodeling and additions and alterations."

Maybe this wording would already take in those additional lines that you need to go out beyond the major interceptor sewers. But to be absolutely certain I think we ought to add this amendment, which would simply say that a sewer treatment work does include whatever necessary network of additional sewer lines the Secretary determines are essential to any particular project.

The cost of building these lines is sometimes as great as and sometimes even greater than the cost of building the plant itself. Many small communities that I have the honor to represent are faced, in New York State, with a mandate from the State to build their plant and the lines. And yet they find that the cost of these projects actually exceeds the assessed valuation of their own property. They cannot take full advantage of this program without help with sewer lines, too. I think the help should be provided if this bill is to do an effective job.

This amendment would make the program more effective. While we all recognize the needs of our larger cities, as the gentleman from New York [Mr. McCARTHY], pointed out awhile ago, they are, after all, a little bit better equipped to finance these works than are the smaller communities. My amendment would make the water pollution program a more meaningful one and one that could be more generally helpful. I urge the adoption of the amendment.

Mr. BLATNIK. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, what the amendment proposes to do, of course, although in a limited way, is to extend the definition of "a sewage treatment facility plant."

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The need for interceptor connectors to lines, of course, is an important one. We do not have the money authorized in this

legislation and in this program to nearly begin to undertake a program of that scope. For instance, in the treatment plant program alone we have a backlog of \$1.8 billion for almost 6,000 communities which do not even have a treatment plant, let alone the connector sewers.

Mr. Chairman, I am in sympathy, and I mean genuine sympathy, with the gentleman's problem and the proposal which he advocates.

We do have legislation to give broader assistance to municipalities in several forms of public works, not only the treatment plants, interceptor sewers, connecting sewers, substations, and so forth, but also water supply systems.

The gentleman from New York [Mr. STRATTON] has been a most consistent and effective supporter of legislation certainly of this type and he has given us some valuable and badly needed assistance and support in connection with the pending bill. It is my sincere hope that we can work together on additional legislation directed toward the problem which the gentleman from New York has described.

Mr. STRATTON. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman from New York.

Mr. STRATTON. The current legislation provides in section 13(c) that, as I mentioned a moment ago, "treatment works" means—includes any extension, improvement, remodeling, additions, and alterations thereof.

Perhaps the chairman could make it clear that this language would seem, for example, to authorize this type of program—if you have an existing sewer treatment plant and some outlying sewers, an extension of that sewer system could be authorized under the current law; is that not correct?

Mr. BLATNIK. No; not the lateral connections of the sewers. The determination under this definition has been made administratively by the Secretary of the Department of Health, Education, and Welfare and it has been quite clear,

and consistently followed, that it applies primarily and directly to the treatment facilities themselves, with some appurtenances or related mechanisms.

Mr. STRATTON. If the gentleman will yield further, obviously we do not mean the laterals into the houses. But unless you can put the sewerlines out into the communities, the new ones that are perhaps now being served by septic tanks, the sewer treatment plant itself is not effective. Perhaps, this could be done under the law as it stands, but it does seem to me that we need to spell it out somewhere either in the amendment which I have offered or in the legislative history on this bill so that provision can be made for these newer areas.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman from Florida.

Mr. CRAMER. Mr. Chairman, I join the gentleman from Minnesota in his opposition to the amendment.

I think the gentleman from New York [Mr. STRATTON] stated the most effective and the clearest reasons for opposing the gentleman's amendment. The cost of this would probably be as great or greater than the entire treatment works program which exists today. No reasonable consideration has been given to this substantial increase in program or otherwise.

Mr. Chairman, I believe the amendment should be defeated.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New York [Mr. STRATTON].

The amendment was rejected.

Mr. SWEENEY. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, we come this afternoon to the close of a debate which has certainly been a distinct compliment to this House. This bill has received the unanimous support on both sides of the Committee on Public Works, and is a piece of legislation which reflects with great credit upon the Committee on Public

Works and its distinguished chairman. However, Mr. Chairman, this is a piece of legislation that reflects with great credit upon the distinguished gentleman from Minnesota, JOHN BLATNIK, the father and the foremost exponent of clean water in America.

Mr. Chairman, I am pleased, coming from the State of Ohio, to add my support to these needed amendments to this program and to note with pride the splendid spirit of bipartisan unity that made the amendments to the original S. 4 bill possible.

Mr. Chairman, we have shown by amendment and by the remarks here during the debate this afternoon that there seems to be agreement that the Federal Government in its attack upon water pollution must proceed cooperatively, with State and local governments and with the vast American industry as well as in cooperation with every agency throughout the land interested in winning ultimately the fight for clear water.

This bill is void of any accusatory tone and is, indeed, a constructive, intelligent approach which has already brought a response from State governments. Now at the moment of the adoption of this bill I am proud to announce to the House that there is in the Great Lakes region, about to be reconvened a five-State regional conference of State Governors to join with the Federal Government in streamlining America's program for clean water. I am proud to participate in this debate and to support this bill.

Mr. DORN. Mr. Chairman, I move to strike out the requisite number of words.

Mr. Chairman, I want to express my deep admiration and respect for the distinguished subcommittee chairman, the gentleman from Minnesota [Mr. BLATNIK]. I commend Mr. BLATNIK for the magnificent job he has done in getting the committee finally to agree unanimously on one of the most important and controversial pieces of legislation to come before the Congress in a number of years.

I commend our committee chairman,

the gentleman from Maryland [Mr. FAL-  
LON], the gentleman from Louisiana [Mr.  
THOMPSON], and the gentleman from  
Texas [Mr. WRIGHT] who played very  
important roles in getting every member  
of the committee to unite on this legis-  
lation. I wish the gentleman from Ala-  
bama [Mr. JONES] could be here during  
this debate. Mr. JONES worked long and  
hard and deserves much credit for final  
committee approval of the bill. I wish  
for him a complete recovery and that he  
will soon be here where he is needed.

This bill in its present form is a good  
piece of legislation. The distinguished  
subcommittee chairman, Mr. BLATNIK,  
deserves the unanimous support of the  
House of Representatives for his bill. I  
believe the passage of this bill today will  
be a significant milestone in the legisla-  
tive history of this great body. I urge  
and believe this bill will pass unani-  
mously.

I want to say, Mr. Chairman, that get-  
ting the various members of this com-  
mittee together on this bill has been a  
monumental accomplishment. By the  
persistent efforts of the gentleman from  
Minnesota and the efforts of many oth-  
ers, we have agreed on a piece of legis-  
lation that will help purify the waters  
of the rivers of this country.

Unanimity could not have been pos-  
sible without the splendid leadership of  
the minority leader, the gentleman from  
Florida [Mr. CRAMER]. The gentleman  
from Ohio [Mr. HARSHA], was most dili-  
gent, dedicated, and cooperative in help-  
ing to eliminate features of the original  
legislation objected to by industry, the  
States, and municipalities. Also, I com-  
mend Mr. BALDWIN, Mr. HALLECK, and  
the entire minority membership of the  
committee.

When this bill becomes law we will  
have the cooperation of the States, the  
local communities, and the industries  
involved.

Some days ago the distinguished  
chairman of the Committee on Interstate  
and Foreign Commerce brought forth a  
piece of controversial legislation—it was

controversial at one time—before this  
body, and received a vote of 402 to 0. I  
hope the House will do the same in con-  
nection with this bill as a tribute to the  
magnificent achievement of the leaders  
of this committee who got all elements  
and factions together. It was no easy  
task to get States, the local communi-  
ties and industry, as well as the Federal  
Government, together on this bill, and I  
hope today the chairman of the subcom-  
mittee and the chairman of the full com-  
mittee will receive a unanimous vote.

The CHAIRMAN. The question is on  
the committee substitute as an amend-  
ment to the Senate bill.

The substitute was agreed to.

The CHAIRMAN. Under the rule, the  
Committee rises.

Accordingly, the Committee rose; and  
the Speaker pro tempore, Mr. ALBERT,  
having resumed the chair, Mr. SMITH of  
Iowa, Chairman of the Committee of the  
Whole House on the State of the Union,  
reported that that Committee, having  
had under consideration the bill (S. 4)  
to amend the Federal Water Pollution  
Control Act, as amended, to establish the

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Federal Water Pollution Control Admin-  
istration, to provide grants for research  
and development, to increase grants for  
construction of municipal sewage treat-  
ment works, to authorize the establish-  
ment of standards of water quality to aid  
in preventing, controlling, and abating  
pollution of interstate waters, and for  
other purposes, pursuant to House Reso-  
lution 339, he reported the bill back to  
the House with an amendment adopted  
by the Committee of the Whole.

The SPEAKER pro tempore. Under  
the rule, the previous question is or-  
dered.

The question is on the amendment.

The amendment was agreed to.

The SPEAKER pro tempore. The  
question is on the engrossment and third  
reading of the bill

The bill was ordered to be engrossed  
and read a third time, and was read the

third time.

The SPEAKER pro tempore. The question is on the passage of the bill.

The question was taken, and the Speaker pro tempore announced that the ayes appeared to have it.

Mr. BLATNIK. Mr. Speaker, I object to the vote on the ground that a quorum is not present and make the point of order that a quorum is not present.

The SPEAKER. Evidently a quorum is not present.

The Doorkeeper will close the doors, the Sergeant at Arms will notify absent Members, and the Clerk will call the roll.

The question was taken; and there were—yeas 396, nays 0, not voting 37, \* \* \*.

\* \* \* \* \*

So the bill was passed.

\* \* \* \* \*

The result of the vote was announced as above recorded.

The doors were opened.

The title was amended so as to read: "An Act to amend the Federal Water Pollution Control Act to establish a Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of sewage treatment works, to require establishment of water quality criteria, and for other purposes."

A motion to reconsider was laid on the table.

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Mr. BROYHILL of North Carolina. Mr. Speaker, I ask unanimous consent that the gentleman from Maine [Mr. TUPPER] may extend his remarks at this point in the RECORD and include extraneous matter.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from North Carolina?

There was no objection.

Mr. TUPPER. Mr. Speaker, the Congress today has the opportunity to make

a splendid addition to the record of the 88th and 89th Congresses by passing the Federal Water Quality Act of 1965. The Congressman from Minnesota [Mr. BLATNIK] deserves our greatest thanks for the untiring and able manner in which he has led the fight for the protection and restoration of the country's waters.

As a former conservation official in my own State of Maine, I fully realize the problems and potential threats that polluted water present.

Maine is a traditional vacation area and has had to deal swiftly with threats to her water resources and only prompt local action has deterred catastrophic conditions.

This problem has become too great and too urgent to have stopgap programs and emergency measures enacted by individual States.

One provision missing from the bill that we shall vote on today, is of the utmost importance—the development of Federal standards for water quality.

One of the problems in fighting pollution, one which I have heard both local and Federal officials complain of, is not knowing where to begin. Do you start trying to clean up the dirtiest streams first, fearing that when you have finished, the rivers that used to be clean will have become degraded? Or do you start with the easier tasks, the rivers that are only slightly less than pure, and allow the rankest rivers to remain eyesores?

Another problem encountered in conducting a pollution control program is that once industries and municipalities have been allowed to start discharging wastes into streams, it is very difficult to make them stop. To build a waste disposal system into an old plant is expensive, much more so than if it had been designed into the plant in the first place. On the other hand, as long as older industries are permitted to discharge untreated wastes, newer plants will not see the justice in their being required to install waste treatment.

Systems of standards for water quality are designed to answer problems like these. Properly administered standards could be, as President Johnson suggested in his message on conservation, used to protect clean water, to abate pollution before it happens. Standards would be invaluable in creating comprehensive plans for pollution abatement and guaranteeing that they would be administered fairly. Perhaps most important, such standards could and would serve as incentives to the States and localities to supply their own high standards for clean water.

We take so many different kinds of standards for granted in our daily life that it is hard to understand why we have none yet for water. We have standards for foods, for meat, for drugs, for advertising, for utilities, for pesticides, for working conditions. In general, Americans welcome the use of quality standards to protect the consumer from dangerous or inferior goods. Yet stream pollution is growing daily, depriving American consumers of many favorite recreations and water sports, depriving fish of their habitat, threatening our drinking water supplies, and, in many cases, creating outright health hazards.

There is little time left for lengthy jurisdictional debates if we are going to save these waters. A peculiar characteristic of rivers and lakes is that they do not respect jurisdiction. Water flows, and with it goes its waste load, and State boundaries affect the flow of a river surprisingly little. A factory or a town may own the land alongside the river, and contain all its buildings and population within the land it owns, but if it discharges waste into the river, it is trespassing. Its wastes will inevitably be carried to its downstream neighbors, and to their neighbors, and so on. Where rivers are concerned, it is certain that no man is an island.

Attempts to establish standards at a State or local level have been helpful, but on the whole have not succeeded in

cleaning up our major rivers, most of which are interstate. Interstate compacts, intended to deal with just such problems, are usually without the legal authority or the immunity from pressure needed to set firm standards and enforce them. The progress that has been made in cleaning up pollution—such as on the Columbia and Potomac, where bacterial contamination at least has been controlled, or in the Colorado River Basin, where dangerous radioactivity has been ended, or in the Menominee River, where pulp and paper discharges will soon be treated, or in the lower Mississippi, where one important source of pesticide discharges has been reduced—has been pri-

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marily due to Federal pressure. Under the present procedures of the Federal Water Pollution Control Act, this pressure is limited to those cases in which an enforcement action is initiated.

The Federal program would be much improved if, without going so far as to initiate enforcement proceedings, the Secretary of Health, Education, and Welfare, consulting and cooperating with the State and local officials and interested parties, could promulgate standards for the upgrading of water quality. A standard-setting procedure would enable the Department to take action not only on severely polluted rivers, but on clean rivers threatened with pollution from new industries or towns, on small rivers that could not claim the extended attention required by an enforcement case, and on special problems, in which one type of pollutant requiring only limited remedial action is the problem. Discharges in violation of the standards would be subject to enforcement actions under regular procedures of the Federal Water Pollution Control Act.

According to the Department of Health, Education, and Welfare there are approximately 200 interstate streams which already have some pollution prob-

lems. No matter what the increased pace and staffing of the Federal pollution control program, there will be no time for enforcement action on all of these in the near future. Lacking any other course, must the Department wait for their turn to come up 20 years hence, by which time mild pollution problems will have become severe and severe ones irremediable?

Water pollution is too big a problem to be solved by taking only one case at a time and relying on only one method. With the authority to set water quality standards I believe that the Department

of Health, Education, and Welfare could begin now a much more flexible, inclusive, and rapid program of pollution control. It would be a program more helpful to the States than the present reliance entirely on enforcement action, and it would be a program designed to deal specifically with the particular problems of each region, basin, and river as effectively as possible. For these reasons it is my hope that the Federal Water Quality Act of 1965 will include a strong provision for water quality standards.

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**1.2h(4)(c) Sept. 21: House and Senate agree to conference report, pp. 24560-24562, 24583, 24587-24592**

**WATER QUALITY ACT OF 1965—  
CONFERENCE REPORT**

Mr. MUSKIE. Mr. President, I submit a report of the committee of conference of the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 4) to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes. I ask unanimous consent for the present consideration of the report.

The PRESIDING OFFICER (Mr. RUSSELL of South Carolina in the chair). The report will be read for the information of the Senate.

The legislative clerk read the report.

(For conference report, see House proceedings of today.)

The PRESIDING OFFICER. Is there objection to the present consideration of the report?

There being no objection, the Senator proceeded to consider the report.

Mr. MUSKIE. Mr. President, the con-

ference report on S. 4 represents a reasonable and sound compromise on the Water Quality Act of 1965. As my colleagues know, it was not easy to obtain agreement on this legislation. On the primary issue of water quality standards there were strong opinions on both sides of the table. In the end, however, the agreement we reached represents both a middle ground and, in many respects, an improvement over the original version as it passed the Senate.

I want to take this opportunity to express my appreciation and gratitude to the Senate conferees, Senators RANDOLPH, MOSS, BOGGS, and PEARSON. The unanimity we reached on the basic issues in S. 4 strengthened our hand immeasurably and added to the quality of the discussions in conference. Through the months since the House enacted its version of S. 4 the Senate Members of the conference and their staffs reviewed the two proposals. Many of their suggestions were incorporated in the final version and contributed to the successful agreement between the representatives of the two bodies. Partisan differences were forgotten in the common effort to develop a meaningful act for the enhancement of the quality of our nation's water supplies.



The discussions in the conference were vigorous, but amicable. The delayed agreement is a measure of the strong feelings related to matters of principle rather than to any unwillingness to reach a consensus. I could not report to my colleagues on the conference without paying tribute to the House conferees and the contribution they made to this legislation on behalf of the House of Representatives and particularly to Congressman JOHN BLATNIK and ROBERT JONES for their leadership on S. 4 and

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in the general effort toward water pollution control and abatement.

I shall not take the time of my colleagues to review in detail the entire conference report on S. 4. That report, and the report of the managers on the part of the House, can be found on pages 24583-24587 of the CONGRESSIONAL RECORD for September 17, 1965.

In brief, the conferees agreed on the establishment of a water pollution control administration in the Department of Health, Education, and Welfare, headed by an Administrator and supervised by an assistant secretary. The Senate conferees accepted the House version, which transfers all of the activities of the present division of water supply and pollution control to the new Administration and spells out in detail the procedures to be used in transferring personnel. We believe an orderly transition can be made from the present arrangement under the Public Health Service to the new Administration.

The managers for both the Senate and the House agreed that the selection of the Administrator is crucial to the success of the program and that his grade level and status should reflect the importance the Congress attaches to this program in establishing it as a separate Administration.

The Senate conferees accepted the House proposals on increased authorizations for sewage treatment grants. These include an increase to \$150 mil-

lion a year for the next 2 years in the total authorization and an increase to \$1,200,000 in individual project authorizations and \$4,800,000 for multi-community projects. Funds appropriated in excess of \$100 million in each of the next 2 fiscal years will be allotted to the several States on the basis of population and individual project authorization limitations will not apply on the use of such funds where States match the Federal contribution.

The Senate conferees agree to these provisions as a temporary measure because of the demonstrated crisis in such States as New York. I know that Senators JAVITS and KENNEDY are very much concerned about this problem. At the same time, the Senate conferees made it very clear that the increases in authorizations and the modifications in the allocation formula do not represent a judgment as to the realistic levels of Federal grants or formula in the years ahead. The Senate Subcommittee on Air and Water Pollution is examining this problem and will make recommendations in the next session of the Congress.

The next major provision in the act is the water quality standards section. As it passed the Senate, S. 4 authorized the Secretary of Health, Education, and Welfare to establish water quality standards on interstate waters or portions thereof in the absence of effective State standards, following a conference of affected Federal, State, interstate, municipal, and industrial representatives. Violation of established standards would be subject to enforcement in accordance with the present enforcement procedures in the Water Pollution Control Act.

The House version of S. 4 contained a provision for States to file letters of intent on the establishment of water quality criteria, with a pollution control grant penalty for failure to file such a letter of intent. There was no provision for the establishment of water quality standards.

The conferees agreed to amend the

Senate version to give the States until June 30, 1967, to establish water quality standards on interstate waters which the Secretary determines are consistent with the purposes of the act. In those cases where the States fail to establish such standards the Secretary is authorized to call a conference of affected, Federal, State, interstate, municipal, and industrial representatives to discuss proposed standards, after which the Secretary is authorized to publish recommended standards.

If a State fails to establish standards consistent with the purposes of the act within 6 months after promulgation of the Standards—unless the Governor of an affected State requests a public hearing within that period—the Secretary is authorized to promulgate his proposed standards. The Governor of an affected State would be permitted to petition for a public hearing within the 6-month period after publication of the proposed standards and up to 30 days following promulgation of the Secretary's standards. The Secretary is required to call such a hearing and to appoint five or more members to the board. The Secretary of Commerce and the heads of other affected Federal departments and agencies are to be given an opportunity to select one member of the board. The same right is accorded the Governor of each affected State. It is the intent of the conferees that the hearing board represent a balance of Federal and State interests.

The hearing board may recommend either: First, establishment of the Secretary's standards; or second, modification of those standards. The Secretary must adopt the board's recommendations. If the board recommends adoption of the Secretary's standards they become effective immediately on the Secretary's receipt of the board's recommendations. If the board recommends modifications in the standards the Secretary must modify them in accordance with the board's recommendations and promulgate them. The revised standards

become effective on promulgation. Revisions in established standards can be considered and proposed by the Secretary on his own motion or on request by the Governor of an affected State in accordance with the foregoing procedures.

Violations of standards under the provisions of this act are subject to Federal abatement action. If the Secretary finds such violation he must notify the violators and interested parties, giving the violators 6 months within which to comply with the standards. If, at the end of that period, the violator has not complied, the Secretary is authorized to bring suit, with the consent of the Governor of the affected State in the case of intrastate pollution, through the Attorney General of the United States under section 10(g) (1) or (2) of the amended Water Pollution Control Act.

This enforcement procedure differs from the procedure followed under the present act by omitting the conference and hearing board stages. Because there is a conference and hearing board under the standard-setting procedure the managers for the House and Senate did not consider a repetition of these proceedings necessary in cases of violations of standards. The conference and hearing board stages remain in enforcement proceedings arising out of endangerment of health or welfare where water quality standards have not been established, as under existing law.

In court proceedings resulting from a suit for violation of water quality standards established under this act, the court is directed to accept in evidence the transcripts of proceedings before the conference and hearing board and to accept other evidence relevant to the alleged violations and the standards. The court is to give due consideration to the "practicability and physical and economic feasibility" of complying with the standards in making judgments in such cases.

There was one final set of compromises in the conference. The House managers agreed to recede on the House "subpena

section" and insisted that the Senate recede on the Senate "patents section."

Measures contained in both versions were: a 10-percent bonus in sewage treatment plant grants for those projects carried out in accordance with an area-wide plan; a 4-year, \$20 million per year research and development program for new and improved methods of controlling the discharge of inadequately treated combined storm and sanitary sewage; authorization for the Secretary to initiate enforcement proceedings in cases where he finds substantial economic injury results from the inability to market shellfish or shellfish products as a result of water pollution, record-keeping and audit provisions; authority for the Secretary of Labor to set labor standards on projects financed through this act under Reorganization Plan No. 14 of 1950; and an additional Assistant Secretary in the Department of Health, Education, and Welfare.

Mr. President, I believe this act, as amended, will give strong impetus to our efforts to control and abate water pollution and to improve the quality of our water supplies.

The conference report is signed by all the conferees on the part of the Senate and by all of the conferees on the part of the House.

Congressional staff members have an important role in any legislation. In the development of S. 4 and in the achievement of the conference report the Senate and House staffs made an invaluable contribution to our success. I am particularly indebted to Ron M. Linton, chief clerk and staff director of the Senate

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Committee on Public Works, William Hildenbrand, legislative assistant to Senator Boggs, and my administrative assistant, Donald E. Nicoll, for their imagination, patience, and skill in making suggestions and drafting successive versions of the bill. A similar contribution was made by the able and coopera-

tive House staff members: Richard J. Sullivan, chief counsel of the House Committee on Public Works; Maurice Tobin, assistant to Congressman BLATNIK; Clifford W. Enfield, minority counsel of the House Committee on Public Works; and Robert L. Mowson, assistant legislative counsel for the House. Without their assistance we could not have this report.

Mr. President, I move the adoption of the report.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

The report was agreed to.

Mr. JAVITS. Mr. President, I am most pleased that the conferees on S. 4 have reached an agreement. The bill was passed by the Senate last January, and by the House in April, and I know that great differences had to be resolved before a final measure could be presented to the Congress.

The measure is of particular importance to the drought-stricken Northeast which must begin extensive water pollution control programs immediately, and and is particularly vital to the State of New York, which will begin a \$1.7 billion program with the aid of these funds.

I would also like to call attention to two changes in the final version of the bill which I sought to have adopted here in the Senate. The first raises the dollar limitation on any single project from \$600,000 to \$1,200,000. The second provides \$50 million a year to the grants program, such additional money to be distributed on the basis of population alone.

The conferees and the distinguished chairman of the subcommittee, the Senator from Maine [Mr. MUSKIE] are to be commended for their fine work on this measure. On behalf of the people of the Empire State, I express my most sincere thanks for their efforts in securing final passage during this session.

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# WATER QUALITY ACT OF 1965

Mr. BLATNIK. Mr. Speaker, I call up the conference report on the bill—S. 4—to amend the Federal Water Pollution Control Act, as amended, to establish the Federal Water Pollution Control Administration, to provide grants for research and development, to increase grants for construction of municipal sewage treatment works, to authorize the establishment of standards of water quality to aid in preventing, controlling, and abating pollution of interstate waters, and for other purposes, \* \* \*.

\* \* \* \* \*

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Mr. BLATNIK. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, we discuss today the very important, conclusive, and the final step on a very important piece of legislation which deals with the control and reduction and, if possible, prevention or at least minimizing the ever-increasing degree of pollution of our water resources of this great country of ours.

Now, Mr. Speaker, we have had good law which this House initially asked for and received back in 1956. This law was subsequently amended in 1961 and this year amended by the other body.

Mr. Speaker, I can report to the Members of the House I am pleased to state that practically all of the version of the House bill was agreed to by the conferees of the other body.

But, Mr. Speaker, we did have a major issue in dispute on the extremely important but likewise complex and complicated and involved matter of establishing standards. That was the major point of dispute. It took us almost 4 months to resolve that dispute.

Mr. Speaker, I am willing to state before my colleagues and for the public record, that the compromise which we have worked out on this very difficult matter of standards involving the great difference between the House version

and the version in the other body as we worked it out, is not only sound, it is not only fair, but it is workable and practical and in my own judgment it makes a better bill than either of the original two bills.

So, Mr. Speaker, I am pleased to come here and report our agreement.

This legislation, as you are all well aware, has been the subject of considerable discussion over the past several months. We have been meeting with the other body formally and informally over the past several months in an effort to iron out the differences between the two versions of the legislation. I believe this has been most successfully accomplished and the conference report we present you today is one which will not only provide authorizations to further continue our fight against the elimination of the pollution in our streams and lakes in all sections of the country, but will, at the same time, provide fair treatment to all those who are affected by this legislation. I believe it is a stronger bill, a more equitable bill, than either of the original two versions. By this I mean the States, cities, towns, the private industries, and individuals themselves, all of whom, as you know, are constant users of our most precious natural resource—water.

Before I continue with my comments on S. 4, might I pay particular tribute to my colleagues on the conference, the distinguished gentleman from Maryland, the Honorable GEORGE H. FALLON, chairman of the Committee on Public Works, the gentleman from Alabama [Mr. JONES], and the two minority members of the conference who contributed so much to the successful completion of what has been a most difficult and trying time, the gentleman from Florida, the ranking minority member of the committee [Mr. CRAMER], and the gentleman from California [Mr. BALDWIN].

This conference report I present to you today is one that has been worked out most carefully.

It embodies, I believe, the best features

of the legislation as it passed the House and the Senate.

Now, Mr. Speaker, to refresh the Members of the House with reference to this legislation, they may recall that in the House version when it came to the matter of standards, the House bill had merely this language: We directed that the States should file with the Secretary of the Department of Health, Education, and Welfare a letter of intent within 90 days after the enactment of this piece of legislation and that on or before June 30, 1967, approximately 2 years hence, that the States establish water quality criteria to be applicable to interstate waters within the States. If they do not file this letter of intent, we had a penalty provision which provided that any Federal assistance to any State or municipal organizations would be cut off.

Mr. Speaker, the Senate version called for the establishment of standards by the Secretary of the Department of Health, Education, and Welfare almost immediately. Oh, yes, we had been to conference and had had an informal type of huddle between the conferees and the Federal agencies involved, as well as with the States and private industry and other private parties with reference to the question of whether the Secretary on his own would establish these standards and proceed promptly to enforce them under the enforcement provisions contained in the existing law. So, here, we were granting almost total power to the Secretary of the Department of Health, Education, and Welfare, to establish standards on a very important and complex issue, and the standards would be promulgated almost immediately, and thereupon enforced.

As a result of the hard fought conference, we now give the States 1 year to write a letter of intent that they will by June of 1967 establish water quality criteria. If after that period of time the State does establish water quality criteria satisfactory to the Secretary of the Department of Health, Education, and

Welfare as he sees it, to meet the objectives of this act, then they shall become the standard for the State.

Second. If a State does not act or if it has water quality criteria which the Secretary of HEW feels are inferior or not adequate to accomplish the purposes of the act, then the Secretary of HEW, after an informal conference with all the parties concerned, the Federal agencies, the State agencies, and individual people, will publish—and do remember this—standards for the given area or the State.

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The State is then given 6 months to develop acceptable standards of their own. If they do so, all well and good. If they do not, then the Secretary after 6 months will promulgate his published standards, as I say, after a 6-month period. Even though these standards promulgated by the Secretary of HEW are made, the Governor of any State may ask for a revision of the standards any time during the 6-month period and up to the 30 days after the Secretary has promulgated the standards. If the Governor asks for revision then the Secretary must grant a hearing. In short, a Governor can ask for a hearing and the Secretary must grant a hearing. This is before a quasi-official board, and a record of all proceedings is kept.

The Senate side accepted the House version of how the board would be appointed. We insisted that the board be appointed by the Secretary rather than the President. The board shall have not less than five members. The membership on the hearing board must be one that has broad balance of representation. Each and all of the States involved in a hearing would appoint their own respective members to the board. The Department of Commerce may appoint its member of the board, and other interested or affected or participant Federal agencies or any other State agency would have their representatives, and a public member would be on the board also, and less than a majority of the

members may be employees of the Department of HEW.

In short, we have made adequate provision for fair representation on the board, and the board shall be as representative as possible of a given area, and the hearings must be held in that area.

This hearing board, after hearing all of the evidence from all parties concerned, can then do either one of two things: Approve the standards and recommend approval at the same time to the Secretary, whereupon he may promulgate them and enforce them. Or the board may modify the proposed standards. These modifications are reported back with a recommendation to the Secretary of HEW. He shall conform and comply with these recommendations of the hearing board and promulgate the standards. We have a process for establishing standards which will be a joint operation at which not only the Federal Government and its agencies, other than the Secretary of HEW, shall be represented, but the States affected shall be represented, private industry shall be represented, the general public shall be represented. In fact, all members affected by the standards are represented on this board, and the recommendations of the board shall govern the final decision of HEW.

All of this would be under the heading, Mr. Speaker, of establishing standards.

So, Mr. Speaker, we have come a long way from the Senate's Secretary setting standards stalemate. We on the House side have receded from the penalty section for noncompliance and have given the States a full year rather than the 90 days restriction for the filing of the letter of intent. Thanks to the diligent work of both Houses, we have before us a procedure that brings the States into full participation in establishing criteria that after June 30, 1967, could become standards.

Let it not be said that the States have not been given full power to establish for themselves a quality of clean water

that they can truly be proud of. Let the RECORD also show that this standard setting process is greatly fortified by the fact that the Governor of the State can petition to have the standards revised and the Secretary must then submit to a hearing board and this hearing board's determination will be final. In short, the States, municipalities, industries, and all other affected parties have a full and fair opportunity to be heard in this very practical and workable procedure that will do much to prevent the pollution of our Nation's waters. Instead of just rolling back pollution that already exists, this procedure serves as a preventive measure. It will serve to prevent pollution before it happens.

From here on, of course, once these standards have been promulgated, then you have the second phase, which is enforcement.

If a standard is violated, and this material is discharged into the waters which would further deteriorate the waters, according to the provisions of the act he may institute enforcement proceedings. However, before any abatement action is initiated the violator or alleged violator is given 6 months for voluntary compliance. Again, you will note in the statement of the managers on the part of the House the alleged violator or violators will not only be given this time for compliance, but will be given full opportunity to meet with and to discuss with either the Secretary or his responsible representative to see if they can work out an arrangement or statement so that an agreeable solution may be arrived at without going into court or instituting a suit.

So we do believe we have worked out a fair and yet effective manner of requiring standards and enforcing those standards. We do it so that the Federal Government with the States and municipalities and public entities as well as private industries and other persons directly interested have a share in the participation because in my own opinion there is no question whatsoever that

with the rapidly increasing problem of pollution which is already of critical proportions in many, many large river basins in different areas of the country, this problem will not be coped with effectively and it will not be solved unless we have a massive joint effort and we think that this procedure that both bodies have agreed upon will provide the opportunity for that kind of effort.

In concluding I merely want to say, and I would like to refresh your memory about how urgent this whole problem is. Time is rapidly running out. In the eastern half of the United States alone, 15 years ago, and I was here in the House then in 1950, water consumption was about 100 billion gallons a day. That is 15 years ago. Now we are in the 1965, and as we look ahead to the year 1980, 15 years from today, the water consumption in use in the eastern half of the United States will increase fourfold from 100 billion gallons of water in 1950—and we are at the half-way point, 15 years later—and projecting into the future 15 years hence—it will be 400 billion gallons or a 400-percent increase.

Now the key to this program that we provide for in this bill is that now we have for the first time placed the emphasis where it belongs in trying to solve this problem, and that is on the prevention and minimizing as much as possible this pollution before it occurs.

We know now and we will know even better after more scientific and technical data is brought in from our respective regional water research laboratories what can and ought to be done as to the nature of pollutants and how to cope with them. When we know that pollution is going to occur in a given area just as surely as the sands run out of an hourglass and when today we know that we will have a very serious pollution problem 10 or 20 years from now, why wait for that to happen when we can have intelligent, systematic, preventive, effective measures to begin now to encourage and make possible orderly

utilization of the water and yet provide for its preservation and conservation for the many uses and the many demands which will be made for that water in the years to come.

Mr. McCARTHY. Mr. Speaker, will the gentleman yield for a question?

Mr. BLATNIK. I yield to the gentleman.

Mr. McCARTHY. As the distinguished gentleman and the father of this legislation knows, my district stretches about 20 miles along the shores of Lake Erie, probably known as the most severely polluted major body of water. This subject of standards has been one of intense interest in New York as well as throughout the country. It seems to me that the compromise reached by the conferees on this matter as to the criteria of standards is eminently fair and reasonable and will accomplish the objectives that the gentleman has in mind. Would the gentleman care to comment on that?

Mr. BLATNIK. Yes. There is no question in my mind that the program will be very effective. As I said earlier, it will bring into play all the parties involved and not merely the Federal agency. The program is definitely needed. There is no question whatsoever that it will be a most effective and workable program. It will give full opportunity for all parties to participate and particularly enable them to show a little more initiative than they have. Some have done an excellent job, many fairly well, and unfortunately too many not well at all. The program will give them a full opportunity to get on the move in 2 years and then from then on the momentum will gather and we will proceed full steam ahead. I am confident that we can handle this needed program.

Mr. OTTINGER. Mr. Speaker, will the gentleman yield?

Mr. BLATNIK. I am pleased to yield to the gentleman from New York.

Mr. OTTINGER. I should like to congratulate the gentleman from Minnesota on the excellent job which the conference committee has done in working out a system whereby we can have Federal standards and State participation. The result is a very fine compromise.

However, I wondered whether it will be necessary to delay the operation of the program until June 30, 1967, when these standards will be put into effect, or will they be put into effect before that date?

Mr. BLATNIK. There is no reason for delay. We are confident that the States will comply by establishing their own water quality criteria just as soon as physically possible. We on the House side felt very strongly that the States ought to be given time to get their own houses in order and get on the way rather than to lower the boom on them now with arbitrary Federal standards.

We do not today have enough information really to come up with practical and reasonable standards. So to prevent unfair or capricious standards by the Federal Government, the States were brought into the picture and given a chance to establish for themselves water quality criteria. By soliciting their cooperation the Federal program is made 50 times as strong as it would be without the participation of the States. Meanwhile, we are developing further information so that 2 years hence, working with the States, the agencies of the Federal Government, the municipalities, and the industry, we will be able to come to an agreement and establish the necessary hearing board mechanism and provide bona fide, ironclad, and yet effective, realistic, and workable standards. So we shall lose no time.

Mr. OTTINGER. The 6 months participation for the States promulgating standards would apply after June 30?

Mr. BLATNIK. No; it could apply before that. On failure of a State to file a letter of intent within a year of enactment of this legislation, the Secretary could publish standards and at the end

of 6 months if the State still has not acted he could promulgate them.

Mr. Speaker, in addition to the standard-setting procedures and the advances made in the enforcement section that includes a full and complete court review of the standards, the House prevailed in other equally important sections of the bill. The Senate side accepted our \$50 million annual increase in construction grants. It also accepted our dollar increase version of individual and multicomunity construction projects. This money is badly needed if we are to meet the backlog of projects.

Again my personal thanks for the generous support over these long months. At last we have a measure that strikes a happy balance between strong controls and fair procedures.

Mr. DORN. Mr. Speaker, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman from South Carolina, who is a very good friend and an able member of the committee, I am pleased to add.

Mr. DORN. Mr. Speaker, and ladies and gentlemen of the House, I should like to take this opportunity to congratulate my distinguished subcommittee chairman for the superb job that he had done in working out this compromise, he and the other members of the conference committee, with the other body, and bringing before this body today a conference report which is excellent, one which is fair, and one which I think more than anything else is a tribute to the distinguished gentleman now in the well for his long suffering, his patience, and his perseverance.

We have here a conference report that I think will have the cooperation of the States, the municipalities, and the industry involved. I want also to praise the minority for their splendid cooperation during the long months it took to develop this important legislation.

This is a good conference report. It is a good bill. Again I wish to congratulate, commend, and thank my distinguished subcommittee chairman for



a magnificent job.

Mr. BLATNIK. I thank the gentleman.

Mr. CRAMER. Mr. Speaker, will the gentleman yield?

Mr. BLATNIK. Yes; I yield to the gentleman from Florida [Mr. CRAMER], the leader of the minority members of the committee on conference.

As I indicated earlier, I wish to make official acknowledgment and public recognition of the constructive and cooperative participation and assistance on the part of the minority members of the conference, without whose assistance, cooperation, and work on this controversial matter, the result would have been impossible. I yield 10 minutes to the gentleman.

Mr. CRAMER. Mr. Speaker, I shall not repeat those matters discussed by the gentleman from Minnesota.

Let me say that I am glad this conference has finally resolved its differences. This was probably one of the longest conferences on record in which agreement was finally reached. There were many weeks between the appointment of conferees and final conference action. I believe the long lapse of time indicates the difficulty of the problems with which we were concerned.

These problems principally involved the one issue of whether Federal water quality standards should be adopted relating to the interstate streams and portions thereof in the United States, or whether the States should retain jurisdiction over the determination of those water quality standards subject to possible review by the Secretary.

Let me say at the outset, I do not intend to oppose the conference report. I signed the conference report. However, if I had been writing the bill which was drafted relating to the standards section in conference, I would have written it differently than it is before us. Nevertheless I believe it is as good a compromise as we could obtain between the Senate and House versions of the legislation.

I believe some significant concessions were made by the other body in the drafts we had before us for consideration, and I will mention those in just a moment. There were a sufficiently large number of concessions and significant concessions, including the subject matter written into the conference report itself, made by the other body, so that I feel I can support the conference report with that language written into that report, so long as the Secretary abides by the language written into that report.

I specifically refer to pages 12 and 13 of the statement of the managers on the part of the House, more specifically to the language at the bottom of page 12. This language relates to what will happen after the standards are set and a given industry is brought in for violation thereof. The question is this: What will then happen?

The Secretary will first decide in his mind that a violation has occurred. The question I was concerned about, in the conference, is that then the Secretary has the power to bring the party, the business, and the State into court, after a lapse of a 6-month period. The 6 months was conceded in conference. The 6 months is intended to give the State and the local industry involved, or whoever may be a violator, an opportunity to conform to the Secretary's demands.

The thing which disturbed me was that once these standards were set, the Secretary could arbitrarily, if he saw fit to do so, bring not only the industry involved but also the State agency as well into court. The objection I had to that procedure was that there was nothing specifically provided to permit the State agency to conform. If water pollution control is going to be a partnership approach, then there must be cooperation with the State and local governments by the Federal agency. That makes it a partnership approach, and in my opinion, that is the only way this program can succeed. To be a partnership, the violator and/or the State agency has

to be given an opportunity for a hearing of some nature with the Secretary before a final determination by the Secretary to file suit, through the Attorney General, for the violation can be made.

Appropriate language has been written into the conference report. I had hoped it would be in the language of the bill we are actually considering, but instead it is in the conference report. If it is lived up to, I believe it will meet that objection.

The language states:

The conferees intend that during such period the Secretary should afford an opportunity for an informal hearing before himself or such hearing officer or board as he may appoint relative to the alleged violation of standards, upon the request of any affected State, alleged violator, or other interested party, so that if possible there can be voluntary agreement reached during this period, thus eliminating the necessity for suit.

That provision helps on that situation. Then we come to the next question.

If we are to have a court review—and this is a question we are faced with in all court review instances—what kind of a court review is it to be?

Is it going to be under the Administrative Procedure Act, with the decision of the administrative agency presumed to

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be proper, and with the weight of overturning the decision on the opposing party, that is, the State or the violator in this instance, he having to prove the indiscretion? No, that is not what we wrote into this in the way of judicial review. This is a complete judicial review. I wish the gentleman from Minnesota would give me his attention relating to these points, because I hope we will have agreement in the debate here as well as the agreement which appears in the House report of the conferees. It is the intention that there be informal hearings during the 6-month period of compliance where voluntary compliance is permitted, following the finding of the Secretary that he believes a violation has occurred. It is the intention before the Secretary files a suit that informal

hearings be held so that the State agency or the violator have a chance to present their case and thus determine whether a court action would follow.

Mr. BLATNIK. If the gentleman will yield, that was the clear and unequivocal opinion of all of the three majority members of the conferees.

Mr. CRAMER. Then, may I ask this one other question on judicial review? As is stated in this report of the managers on the part of the House, is it not true the intention of the House conferees was to write in a full and complete judicial review including the question of all standards that have been established that might affect that industry? They are all subject to review when the question of a violation is raised even though the specific standard which is alleged to have been violated will be included, but in addition to that all other standards that might affect that industry likewise will be subject to review as to their reasonableness?

Mr. BLATNIK. Yes. That is correct.

Mr. CRAMER. I wanted to make sure that is on the RECORD, because those two points, I think, are the two principal points that tied up the conferees for this lengthy period. I am glad to get it on the RECORD that that is clear. The conferees also got a concession out of the other body to the effect that when these standards are determined by the Secretary after consultation with the States he shall then publish them in the Federal Register and over a period of time the State shall have an opportunity to be heard before, first, a conference, and then the standards are promulgated. Thirty days thereafter the States can ask for a hearing before an official hearing board, if they disagree. That is the protection given to the States, the local communities, and the industries involved. That hearing board, it was proposed in the draft we had before us, was to be appointed by the President. The other body made the concession that it should be appointed by the Secretary. Is that correct?

Mr. BLATNIK. Yes, sir. That is certainly correct.

Mr. CRAMER. This protection to the State and the local violator or the proposed possible prospective violator is through the appointment of a hearing board. That hearing board is appointed by the Secretary of HEW and not the President of the United States. We also stated that each State affected may not recommend, as was in the draft language, but select.

Mr. BLATNIK. That is correct. Select their members.

Mr. CRAMER. There is no question from the standpoint of legislative history and intent that the State to be affected has the right to membership on the hearing board which determines the reasonableness of the standards after they are published in the Federal Register. Is that not correct?

Mr. BLATNIK. That is absolutely correct.

Mr. CRAMER. That board has the power to modify its proposed regulations. Is that not correct?

Mr. BLATNIK. That is correct.

Mr. CRAMER. The Secretary must issue regulations carrying out the hearing board's—not his but the hearing board's—determination?

Mr. BLATNIK. That is correct. Yes, it is.

Mr. CRAMER. I just want to point out one or two other matters.

The SPEAKER pro tempore. The time of the gentleman has expired.

Mr. BLATNIK. Mr. Speaker, I yield the gentleman 2 additional minutes.

Mr. CRAMER. We on this side of the aisle have been insisting—we did when we had the question of the additional \$50 million authorization a few years ago, and we now have \$50 million more in this legislation—if this program is going to succeed, that the States should be encouraged to help to match these additional Federal funds. There was a provision written into the House bill which, incidentally, passed unanimously, that required the States to match Fed-

eral funds for the construction of sewage treatment works, if the States wanted to go above the ceiling set in the proposed legislation. That provision is retained in the House-Senate conference. Is that not correct, I ask the gentleman?

Mr. BLATNIK. Yes.

Mr. CRAMER. Mr. Speaker, let me say in closing that I support the conference report. It took a long time to work it out. I think it is probably the best we could do in protecting the rights of the States and the industries that might be involved and giving them the proper opportunity to be heard.

I will say that the minority and the majority were given an opportunity on this legislation to work their will without the interference of the White House and the executive branch of the Government. The conferees of the House and Senate did an outstanding job in coming up with a bill that will do the job and not work undue hardships. This is a tough problem. It is a problem we have to meet. We are meeting our responsibility with this conference report, and I hope it will be adopted.

Mr. Speaker, I think it is most unfortunate that in another matter involving even more money which is before the Committee on Public Works, involving \$160 million a year and this water pollution legislation only involves \$150 million a year and I am now talking about highway beautification, that we in this body are not likewise being given an opportunity to consider and determine the matter on its merits, in trying to get a consensus between the majority and the minority as between what is right and wrong. I am referring, as I said, to the matter of highway beautification. I think that the inability of a committee to work its own will is wrong.

Mr. BLATNIK. Mr. Speaker, I yield 1 minute to the gentleman from Oregon [Mr. DUNCAN].

Mr. DUNCAN of Oregon. Mr. Speaker, I said when this bill was before us earlier this year that it was a tremendous step forward, but I was disappointed

that it did not go further. Today I think on the question of the establishment of water standards the chairman and the conferees on both sides of the aisle are to be congratulated for bringing back a stronger bill—though I can still foresee a possible delay in excess of 2½ years before standards are set. This is a delay the Nation can ill afford.

Mr. Speaker, for years we have been on a treadmill. As fast as we go, we are still unable or barely able to stay up with the increased extent of the problem. As a member of the Appropriations Subcommittee dealing with this subject, I was disappointed last spring to learn that the maximum authorization for Federal grants for municipal sewer systems was only \$100 million. It would take a full authorization of \$200 million Federal dollars to meet the demands of the municipalities for the construction of sewer systems in cases where local bonding authority for the local contribution already exists.

I ask the chairman, is it not true that this bill increases the authorization from \$100 million to \$150 million?

Mr. BLATNIK. That is correct; that is a 50-percent increase.

Mr. DUNCAN of Oregon. I am delighted with the increase. I am disappointed that it isn't greater, when we know what must be done and know how to do it, as we do here, and when the threat of failure is so great—as it is in the case of water pollution—we cannot justify doing less than our best. I intend to press for the appropriation of the full authorization in the appropriation subcommittee on which I serve. I hope that these funds, together with those that will be appropriated in support of related programs authorized by the new housing bill and the Economic Redevelopment Act, will do the job which must be done.

Mr. Speaker, the name of JOHN BLATNIK has always been in the forefront of the battle for pure water. This bill adds further honor to an already honored name.

Mr. BLATNIK. Mr. Speaker, I yield 5 minutes to the distinguished gentleman from California [Mr. BALDWIN], who played a most effective role in working out this compromise arrangement.

Mr. BALDWIN. Mr. Speaker, I rise in support of this conference report. The conferees worked long and hard in an effort to arrive at a reasonable and effective compromise between the House- and Senate-passed bills. We believe that this conference report does represent

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such a reasonable and equitable compromise.

Basically, we have a most serious problem facing the Nation in the field of water pollution. That problem is that the supply of water in our streams remains approximately the same; in fact, in some areas right now it has been reduced. But the sources of pollution have been going up steadily year by year as our population increases and as the size of our cities increases, and as the number of our industries increases. Therefore, the potential sources of pollution have been increasing each year and our streams are in greater and greater danger of being polluted to a point where their natural beauty will be seriously adversely affected.

Mr. Speaker, the purpose of this bill is to meet this issue head on and to endeavor to take steps that will result in an improvement in the quality of our streams.

Mr. Speaker, this bill gives recognition to the historic division of power between the Federal Government and the State governments in this field. This bill applies to interstate streams, streams in which the Federal Government has a proper interest under the Constitution of the United States.

It provides that the States will have the first opportunity to establish criteria for these streams that will meet reasonable standards. But if those States do not exercise that first opportunity to

establish criteria that will meet reasonable standards, then this bill for the first time gives the Secretary of the Department of Commerce the power to establish such standards and to promulgate those standards and to enforce those standards. This is only right and proper because the Federal Government has a legitimate interest under the Constitution in interstate streams.

Now, Mr. Speaker, another extremely important phase of this bill is the allocation of \$20 million for research and demonstration projects dealing with sewers that handle both sewage and also storm drainage.

In this field we have many problems throughout the United States and many of our cities have inadequate sewer systems today or combinations of sewers which also have to handle storm waters. Many of these systems are inadequate. When serious storms occur the amount of storm water coming into those sewer systems is such that the treatment plants cannot handle the full flow and a part of the untreated sewage gets into the streams and creates serious problems of water pollution. Therefore, we will have to find an effective method in dealing with and controlling this problem, and that is the purpose for the authorization of \$20 million a year for demonstration grants in this particular field.

The bill also establishes a higher priority within the Department of Commerce for the agency dealing with this problem. Therefore, the Public Health Service has been raised in stature you might say to an agency called the Water Pollution Control Administration which will be under the jurisdiction of an Assistant Secretary of Commerce in order to give it the status required to deal with this increasingly important problem.

Mr. Speaker, this conference report is a good conference report. It represents an effective stride forward in meeting the needs of our Nation in controlling water pollution.

Mr. Speaker, I am convinced that the great majority of the people of our Na-

tion and all of the conservation groups of our Nation are most desirous that the Congress take positive action along these lines in order to deal effectively with this difficult problem.

Mr. KUNKEL. Mr. Speaker, will the gentleman yield?

Mr. BALDWIN. I am glad to yield to the gentleman from Pennsylvania.

Mr. KUNKEL. Mr. Speaker, I want to compliment the gentleman from California as well as the chairman of this committee and the other members of the conference committee for the magnificent job they have done in upholding the House position and in bringing back what in my judgment as a member of the Public Works Committee is one of the best bills we have ever had in this House of Representatives.

Mr. BLATNIK. Mr. Speaker, I yield 2 minutes to the gentleman from Illinois [Mr. McCLODY].

Mr. McCLODY. Mr. Speaker, I thank the gentleman for yielding and I, too, want to compliment the gentleman from Minnesota [Mr. BLATNIK], and the gentleman from Florida [Mr. CRAMER], as well as all of the members of the conference committee who brought forth this conference committee report.

It seems to me that the report resolves several difficult problems in a most appropriate and admirable way.

Mr. Speaker, my familiarity with this subject of control of water pollution results in large part from my service during the last session when I served on the so-called Jones committee, a subcommittee of the House Committee on Government Operations, chaired by the distinguished gentleman from Alabama [Mr. JONES] at which time we investigated the subject of water pollution throughout the entire Nation.

As a result of this experience I came to gain a great respect for the ability and record of progress demonstrated by some of the local and State agencies charged with this responsibility of water pollution control.

Mr. Speaker, I am delighted to see

that the conference committee report and the bill recognize the efficacy of these local and State agencies.

I cannot help but feel that responsibility for reducing and eliminating water pollution is one that will have to be undertaken in the long run by the local and State groups. This new legislation should not be interpreted as shifting responsibility to Washington. Instead, it should be noted that it affords direction and guidance on the part of the Federal Government and challenges the local and State agencies to do the job which they are charged with performing under the present legislation and which they are capable of performing.

We should not have any illusions about what we can do from Washington. We are going to have to recognize that water pollution problems are different wherever we find them, and each one differs from every other problem. While we provide funds, while we provide direction, while we provide a new administration for the purpose of resolving the problem of water pollution, at the same time the local and State governments must continue with their responsibility.

Mr. BLATNIK. Mr. Speaker, I thank the gentleman for his excellent statement. I want to express my appreciation to all the conferees and to the able and respected chairman of our full committee, the gentleman from Maryland [Mr. FALLON], for his support and for his competence and tolerance which enabled us to come out with a workable bill that I know has his support.

Mrs. DWYER. Mr. Speaker, all those who are deeply concerned at the extent to which pollution of our rivers and streams has denied our people the clean water so essential for our health and well-being must welcome the long-delayed appearance here today of the conference report on the Water Quality Act of 1965.

While I recognize that the compromise bill has given rise to some doubt about the speed and effectiveness with which the essential water quality standards can

be agreed on and implemented, I share the conclusion of the Daily Journal of Elizabeth, N. J., that the legislation will bolster the antipollution cause and do much long-range good.

Final approval of this bill will place a heavy responsibility on State and Federal officials to get about the business of cleaning up the rivers and streams of the United States, so many of which—because of years of pollution—have become virtually unusable. The loss of this immense supply of water has contributed greatly to the present drought emergency in the Northeast. The recovery of the water—through enforcement of adequate water standards and more efficient administration of water pollution control statutes, which this bill will make possible—can help assure a successful attack on the long-range threat of drought.

As a part of my remarks, Mr. Speaker, I include the text of the Daily Journal editorial of September 17, 1965.

#### A WATER POLLUTION BILL AT LAST

A compromise nearly 5 months overdue has washed away the barriers to new Federal legislation for the control of water pollution. Its significance is heightened by the drought plight of the Northeast although, of course, the benefits will not come quickly.

The bill gives the States until July 1, 1967, to set water quality standards. It will take a long time to clean up streams and rivers rendered unusable in the present emergency by industrial contamination which has been pouring into them for years.

There's a handy example in the open sewer which is the Hudson River. Earlier this year, the harmful effects of industrial pollution were dramatized for New Jersey when 15,000 trout died in cyanide-tainted waters at the State hatchery in Hackettstown.

Regrettably, the bill had to be weakened by concessions in order to get it passed. The Senate measure, adopted January 28, empowered the Secretary of Health, Education,

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and Welfare to set the water quality standards. Under the revision the States are given the opportunity first.

The change will please those who think the Federal Government is taking away too many of the States rights. But if the States would meet their obligations, there would be no reason for Washington to do what's

obviously necessary.

Officials right now would not be casting about so anxiously for sources of potable water if greater attention had been paid by the States and their communities to the problem of pollution. In view of this laxity, more might have been accomplished faster by having the HEW Secretary fix the water standards.

Another provision in the compromise version could be used as a stalling tactic by industry. Companies will be allowed to appeal to the courts for exemptions from the standards.

Watered down as it is, though, the legislation will bolster the antipollution cause. It should do much long-range good.

Mr. BLATNIK. Mr. Speaker, I move the previous question on the conference report.

The previous question was ordered.

The SPEAKER pro tempore (Mr. ALBERT). The question is on the conference report.

The question was taken, and the Speaker pro tempore announced that the ayes had it.

Mr. ASHBROOK. Mr. Speaker, I object to the vote on the ground that a quorum is not present, and make the point of order that a quorum is not present.

The SPEAKER pro tempore. Evidently a quorum is not present.

The Doorkeeper will close the doors, the Sergeant at Arms will notify absent Members, and the Clerk will call the roll.

The question was taken; and there were—yeas 381, nays 0, not voting 51, as follows:

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## 1.2i 1966 REORGANIZATION PLAN NO. 2, MAY 10, 1966

31 Fed. Reg. 6857, 80 Stat. 1608

Providing for Reorganization of Certain Water Pollution Control Functions. Prepared by the President and Transmitted to Congress, February 28, 1966, Pursuant to the Provisions of the Reorganization Act of 1949, as Amended. Reorganization Plan Effective, with the Assent of Congress, May 10, 1966.

### WATER POLLUTION CONTROL

SECTION 1. TRANSFERS OF FUNCTIONS AND AGENCIES.—(a) Except as otherwise provided in this section, all functions of the Secretary of Health, Education, and Welfare and of the Department of Health, Education, and Welfare under the Federal Water Pollution Control Act, as amended, hereinafter referred to as the Act (33 U.S.C. 466 et seq.), including all functions of other officers, or of employees or agencies, of that Department under the Act, are hereby transferred to the Secretary of the Interior.

(b) The Federal Water Pollution Control Administration is hereby transferred to the Department of the Interior.

(c) (1) The Water Pollution Control Advisory Board, together with its functions, is hereby transferred to the Department of the Interior.

(2) The functions of the Secretary of Health, Education, and Wel-

fare (including those of his designee) under section 9<sup>1</sup> of the Act shall be deemed to be hereby transferred to the secretary of the Interior.

(3) The Secretary of Health, Education, and Welfare shall be an additional member of the said Board as provided for by section 9<sup>1</sup> of the Act and as modified by this reorganization plan.

(d) (1) The Hearing Boards provided for in sections 10(c) (4)<sup>2</sup> and 10(f)<sup>3</sup> of the Act, including any Boards so provided for which may be in existence on the effective date of this reorganization plan, together with their respective functions, are hereby transferred to the Department of the Interior.

(2) The functions of the Secretary of Health, Education, and Welfare under the said sections 10(c) (4)<sup>2</sup> and 10(f)<sup>3</sup> shall be deemed to be hereby transferred to the Secretary of the Interior.

(3) The Secretary of the Interior shall give the Secretary of Health, Education, and Welfare opportunity to select a member of each Hearing Board appointed pursuant to sections 10(c) (4)<sup>2</sup> and 10(f)<sup>3</sup> of the Act as modified by this reorganization plan.

(e) There are excepted from the transfers effected by subsection (a) of this section (1) the functions of the Secretary of Health, Education, and Welfare and the Assistant Secretary of Health, Education, and Welfare under clause (2) of the second sentence of section 1(b)<sup>4</sup> of the Act, and (2) so much of the functions of the Secretary of Health, Education, and Welfare under section 3(b) (2)<sup>5</sup> of the Act as relates to public health aspects.

(f) The functions of the Surgeon General under section 2(k) of the Water Quality Act of 1965 (79 Stat. 905)<sup>6</sup> are transferred to the Secretary of Health, Education, and Welfare. Within 90 days after this reorganization plan becomes effective, the Secretary of the Interior and the Secretary of Health, Education, and Welfare shall present to the President for his approval an interdepartmental agreement providing in detail for the implementation of the consultations

<sup>1</sup> Sec. 9 relates to Water Pollution Control Advisory Board.

<sup>2</sup> Sec. 10(c) (4) relates to Hearing Board appointed to consider water quality standards.

<sup>3</sup> Sec. 10(f) relates to Hearing Board appointed to make findings and recommendations with respect to pollution of interstate or navigable waters which endangers the health or welfare of persons.

<sup>4</sup> Sec. 1(b) relates to the administration of functions of the Department of Health, Education, and Welfare related to water pollution, other than those authorized by the Act. The attached print of the Act reflects this provision of the reorganization plan.

<sup>5</sup> Sec. 3(b) (2) relates to giving advice to Federal construction agencies on the need for and the value of storage for streamflow regulation for water quality control in the planning of reservoirs.

<sup>6</sup> Sec. 2(k) of the Water Quality Act of 1965 does not amend the basic Federal Water Pollution Control Act. The subsection requires that the Surgeon General shall be consulted by the head of the Federal Water Pollution Control Administration on the public health aspects relating to water pollution over which the latter official has administrative responsibility.



provided for by said section 2(k). Such interdepartmental agreement may be modified from time to time by the two Secretaries with the approval of the President.

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(g) The functions of the Secretary of Health, Education, and Welfare under sections 2(b), (c), and (g)<sup>7</sup> of the Water Quality Act of 1965 are hereby transferred to the Secretary of the Interior: *Provided*, That the Secretary of the Interior may exercise the authority to provide further periods for the transfer to classified positions in the Federal Water Pollution Control Administration of commissioned officers of the Public Health Service under said section 2(b) only with the concurrence of the Secretary of Health, Education, and Welfare.

(h) The functions of the Secretary of Health, Education, and Welfare under the following provisions of law are hereby transferred to the Secretary of the Interior:

(1) Section 702(a) of the Housing and Urban Development Act of 1965 (79 Stat. 490).<sup>8</sup>

(2) Section 212 of the Appalachian Regional Development Act of 1965 (79 Stat. 16).<sup>9</sup>

(3) Section 106 of the Public Works and Economic Development Act of 1965 (79 Stat. 544).<sup>10</sup>

**SEC. 2. ASSISTANT SECRETARY OF THE INTERIOR.**—There shall be in the Department of the Interior one additional Assistant Secretary of the Interior, shall be appointed by the President, by and with the advice and consent of the Senate, who shall, except as the Secretary of the Interior may direct otherwise, assist the Secretary in the dis-

<sup>7</sup> Sec. 2 of the Water Quality Act of 1965 includes provisions relating to the voluntary transfer of civil service status of commissioned officers of the Public Health Service performing functions relating to the Federal Water Pollution Control Act. These provisions do not amend the basic Federal Water Pollution Control Act.

<sup>8</sup> Sec. 207(a) of the Housing and Urban Development Act of 1965 provides that no grant for sewer facilities may be made by the Secretary of Housing and Urban Development (formerly the Housing and Home Finance Administrator) unless the Secretary of Health, Education, and Welfare certifies to the former official that any waste material carried by such facilities will be adequately treated before it is discharged into any public waterway so as to meet applicable Federal, State, interstate, or local water quality standards.

<sup>9</sup> Sec. 212 of the Appalachian Regional Development Act of 1965 authorizes the Secretary of Health, Education, and Welfare to make grants for the construction of sewage treatment works in the Appalachian Region in accordance with the provisions of the Federal Water Pollution Control Act, without regard to appropriation authorization ceilings or State allotments.

<sup>10</sup> Sec. 106 of the Public Works and Economic Development Act of 1965 provides that no financial assistance, through grants, loans, guarantees, or otherwise, shall be made under the Act to be used directly or indirectly for sewer or other waste disposal facilities unless the Secretary of Health, Education, and Welfare certifies to the Secretary of Commerce that any waste material carried by such facilities will be adequately treated before it is discharged into any public waterway so as to meet applicable Federal, State, interstate, or local water quality standards.

charge of the functions transferred to him hereunder, who shall perform such other duties as the Secretary shall from time to time prescribe, and who shall receive compensation at the rate now or hereafter prescribed by law for Assistant Secretaries of the Interior.

**SEC. 3. PERFORMANCE OF TRANSFERRED FUNCTIONS.**—The provisions of sections 2 and 5 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262) <sup>11</sup> shall be applicable to the functions transferred hereunder to the Secretary of the Interior to the same extent as they are applicable to the functions transferred to the Secretary thereunder.

**SEC. 4. INCIDENTAL PROVISIONS.**—(a) So much of the personnel, property, records, and unexpended balances of appropriations, allocations, and other funds, employed, used, held, available, or to be made available in connection with the functions transferred to the Secretary of the Interior or the Department of the Interior by this reorganization plan as the Director of the Bureau of the Budget shall determine shall be transferred to the Department of the Interior at such time or times as the Director shall direct.

(b) Such further measures and dispositions as the Director of the Bureau of the Budget shall deem to be necessary in order to effectuate the transfers referred to in subsection (a) of this section shall be carried out in such manner as he shall direct and by such agencies as he shall designate.

(c) This reorganization plan shall not impair the transfer rights and benefits of commissioned officers of the Public Health Service provided by section 2 of the Water Quality Act of 1965.<sup>7</sup>

**SEC. 5. ABOLITION OF OFFICE.**—(a) There is hereby abolished that office of Assistant Secretary of Health, Education, and Welfare the incumbent of which is on date of the transmittal of this reorganization plan to the Congress the Assistant Secretary of Health, Education, and Welfare designated by the Secretary of Health, Education, and Welfare under the provisions of section 1 (b) <sup>12</sup> of the Act.

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(b) The Secretary of Health, Education, and Welfare shall make such provisions as he shall deem to be necessary respecting the wind-

<sup>11</sup> Reorganization Plan No. 3 of 1950 transferred to the Secretary of the Interior (with certain exceptions) all functions of all other officers of the Department and all functions of all agencies and all employees of the Department. Sec. 2 authorized him to delegate functions to any other officer, any agency, or any employee of the Department. Sec. 5 authorized him to effect incidental transfers within the Department of records, property, personnel, and unexpended funds.

<sup>12</sup> Sec. 1 (b) provides that the Secretary of Health, Education, and Welfare shall administer the Act through the Federal Water Pollution Control Administration and with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him. The attached print of the Act reflects the abolition of this position and the establishment of the position of an additional Assistant Secretary of the Interior under Section 2 of the reorganization plan.

ing up of any outstanding affairs of the Assistant Secretary whose office is abolished by subsection (a) of this section.

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**1.2i(1) INTERDEPARTMENTAL AGREEMENT CONCERNING  
CONSULTATION ON HEALTH ASPECTS OF WATER  
POLLUTION CONTROL, SECRETARY OF THE INTERIOR,  
SECRETARY OF HEALTH, EDUCATION, AND WELFARE,  
JULY 1, 1966**

1. This Interdepartmental Agreement has been developed in accordance with the provisions of Section 1(f) of Reorganization Plan No. 2 of 1966, which states:

"The functions of the Surgeon General under Section 2(k) of the Water Quality Act of 1965 (79 Stat. 905) are transferred to the Secretary of Health, Education, and Welfare. Within 90 days after this reorganization plan becomes effective, the Secretary of the Interior and the Secretary of Health, Education, and Welfare shall present to the President for his approval an interdepartmental agreement providing in detail for the implementation of the consultations provided for by said Section 2(k). Such interdepartmental agreement may be modified from time to time by the two Secretaries with the approval of the President."

2. The functions referred to above are defined by Section 2(k) of the Water Quality Act of 1965, as follows:

The Surgeon General shall be consulted by the head of the Administration on the public health aspects relating to water pollution over which the head of such Administration has administrative responsibility."

3. The public health aspects of water pollution relate to man's drinking water; to his contact with water in recreation and work; to the contamination of food sources, particularly shellfish; and to the breeding of specific insect vectors of disease. The health threat is of three types; (a) chemical—both organic and inorganic contaminants, which can result in acute toxic or long-term chronic effects on humans; (b) biological—microbiological contaminants and insect vectors associated with spread of communicable disease; and (c) radiological—radioactive contaminants which in very low level concentrations may produce radiation damage in humans.

4. Consultation between the Departments of Health, Education, and Welfare and the Interior under the terms of this Agreement shall be based upon the following general concept:

(a) The Department of the Interior is responsible for administering the Federal Water Pollution Control Act as amended; certain functions relating to water pollution control under Section 702 (a) of the Housing and Urban Development Act

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of 1965, and Section 106 of the Public Works and Economic Development Act of 1965, and Executive Order 11288, "Prevention, Control, and Abatement of Water Pollution by Federal Activities."

The stated purpose of the Federal Water Pollution Control Act is "to enhance the quality and value of the nation's water resources and to establish a national policy for the prevention, control, and abatement of water pollution." The responsibilities of the Department of the Interior, under the above legislation and Executive Order, involve the prevention and control of water pollution in consequence of the benefits resulting to the public health and welfare, giving due regard to the improvements which are necessary to conserve the nation's waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses. To meet these responsibilities the Department of the Interior, through the Federal Water Pollution Control Administration, conducts programs to identify and measure the extent of pollution and its effects on water uses and to assure the treatment and control of waterborne wastes.

(b) The Department of Health, Education, and Welfare, under the Public Health Service Act as amended, is responsible for the protection of the public health. Within this responsibility, the Department through the Public Health Service is, therefore, concerned with the causes, diagnosis, treatment, control and prevention of physical and mental diseases and impairments of man. As related to Reorganization Plan No. 2, these responsibilities include: determination of the health significance of water pollution; investigation of waterborne diseases and means for their control; provision of consultation to the Department of the Interior on the public health aspects of water pollution; and advising on the public health questions involved in the inclusion of storage for water quality control in Federal reservoirs.

5. Under the terms of this Interdepartmental Agreement the Department of Health, Education, and Welfare will provide advice to the Department of the Interior as follows:

(a) Recommendations on criteria for water quality standard setting based on health aspects of intended water use for drinking water supplies; shellfish and other marine food production, bathing, and other water contact activities. Recommendations will be provided and modified as new supporting data are developed.

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(b) Upon request, consultation and technical assistance in water-related health problems, as these may arise in connection with water pollution control activities, such as comprehensive pollution control programs, enforcement actions, control of pollution from Federal installations, water pollution research projects, construction grants, and the study of water pollution from vessel operations. In cases where epidemiological surveillance activities indicate that a probable public health hazard exists, the Public Health Service will initiate appropriate action to advise the Federal Water Pollution Control Administration.

(c) Review and comment on construction grant applications and on requirements for control of pollution from Federal installations for specific projects whose operation may adversely affect the sanitation of shellfish-growing waters. The Federal Water Pollution Control Administration will refer all such projects to the Public Health Service for review and comment.

6. Section 1 (e) of Reorganization Plan No. 2 of 1968 provides for

the Department of Health, Education, and Welfare to advise on public health questions involved in determinations by Federal agencies of the need for and value of the inclusion of storage for water quality control in Federal reservoirs. Advice on the effects of stream-flow regulation on public health will be provided by the Public Health Service based upon the studies prepared by the Federal Water Pollution Control Administration under Section 3 (b) of the Federal Water Pollution Control Act. The Federal Water Pollution Control Administration report will be provided to the Public Health Service for review and comment. The Public Health Service comments, together with its own report on the production of disease-transmitting insects and other environmental health considerations in the project area, will be submitted to the Federal construction agency concerned.

7. To assure an adequate basis for such advice and consultation to the Department of the Interior, the Department of Health, Education, and Welfare will, through the Public Health Service, conduct the following kinds of studies on the health aspects of water pollution:

(a) Epidemiological, microbiological, radiological, and toxicological research and investigations into the human health significance of waterborne contaminants, to determine health tolerance for such contaminants as they affect drinking water supplies, shellfish and other marine foods production, and water contact activities.

(b) Epidemiological surveillance of the incidence of waterborne disease based on disease reporting, and on health-related water quality data derived from the Public Health Service drinking water quality network established under the Interstate Quarantine Regulations, the National Shellfish Sanitation Program, and

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the Radiation Surveillance Center, and on data from the program activities of the Federal Water Pollution Control Administration.

Investigation of waterborne disease outbreaks will be conducted in cooperation with State and local health departments. Data and participation will be requested from the Federal Water Pollution Control Administration when water pollution is involved in the outbreak. Reports based on these investigations which identify pollution that presents a danger to health will be referred to the Federal Water Pollution Control Administration for appropriate action.

(c) Studies of the relationship of surface water characteristics to the production of disease vectors such as disease-transmitting insects, snails, and protozoa.

(d) Development of techniques for the identification, measurement and study of the behavior of waterborne contaminants which cause or influence disease, such as viruses, bacteria, organic chemicals, and trace elements. The results of these Public Health Service studies will be made available to the Federal Water Pollution Control Administration as a complement to its studies on identification and measurement of water pollutants, the results of which in turn will be made available to the Public Health Service.

(e) Study of methods of removing contaminants of health significance to meet human tolerance levels as related to drinking water, swimming pools, shellfish depuration, and food processing. To avoid duplication of Federal installations for pilot plants, when such facilities are required to study methods of removing contaminants from drinking water, Public Health Service personnel may use Depart-

ment of the Interior facilities. To assure that such installations will adequately serve such purposes, the Department of the Interior shall consult with the Department of Health, Education, and Welfare in their design.

(f) Study of the human health relationship of waterborne contaminants to animals and plants used as sources of foods, such as shellfish and other marine foods, food crops irrigated with polluted water, including their field packaging, and use of sewage sludge as a fertilizer and soil conditioner.

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8. The Public Health Service and the Federal Water Pollution Control Administration will exchange on a regular basis relevant health-related water quality data and research results. Particular attention will be given to prompt exchange of significant new findings which would affect the program responsibilities of either agency.

9. To effect essential coordination between Public Health Service and the Federal Water Pollution Control Administration, and to insure fulfillment of this agreement, each agency will designate an official liaison representative. These representatives, together with appropriate staff, shall meet at the request of either agency to discuss measures taken to implement this agreement and review any evident or emerging technical, administrative or fiscal problems which either agency considers might affect the proper functioning of this agreement. Any unresolved problems will be brought to the attention of the respective Secretaries.

JOHN W. GARDNER,  
*Secretary of Health, Education, and Welfare.*

STEWART L. UDALL,  
*Secretary of the Interior.*

LYNDON B. JOHNSON,  
*The President.*

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## 1.2j THE CLEAN WATER RESTORATION ACT OF 1966

November 3, 1966, P.L. 89-753, 80 Stat. 1246

AN ACT To amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such Act.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Clean Water Restoration Act of 1966."*

### TITLE I

SEC. 101. Section 3 of the Federal Water Pollution Control Act, as amended, is amended by adding at the end thereof the following:

"(c) (1) The Secretary shall, at the request of the Governor of a State, or a majority of the governors when more than one State is

involved, make a grant to pay not to exceed 50 per centum of the administrative expenses of a planning agency for a period not to exceed 3 years, if such agency provides for adequate representation of appropriate State, interstate, local, or (when appropriate) international, interests in the basin or portion thereof involved and is capable of developing an effective, comprehensive water quality control and abatement plan for a basin.

“(2) Each planning agency receiving a grant under this subsection shall develop a comprehensive pollution control and abatement plan for the basin which—

“(A) is consistent with any applicable water quality standards established pursuant to current law within the basin;

“(B) recommends such treatment works and sewer systems as will provide the most effective and economical means of collection, storage, treatment, and purification of wastes and recommends means to encourage both municipal and industrial use of such works and systems; and

“(C) recommends maintenance and improvement of water quality standards within the basin or portion thereof and recommends methods of adequately financing those facilities as may be necessary to implement the plan.

“(3) For the purposes of this subsection the term ‘basin’ includes, but is not limited to, rivers and their tributaries, streams, coastal waters, sounds, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby.”

## TITLE II

SEC. 201. (a) Section 6 of the Federal Water Pollution Control Act is amended to read as follows:

### “GRANTS FOR RESEARCH AND DEVELOPMENT

“SEC. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipality or interstate agency for the purpose of—

“(1) assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other wastes from sewers which carry storm water or both storm water and sewage or other wastes, or

“(2) assisting in the development of any project which will demonstrate advanced waste treatment and water purification methods (including the temporary use of new or improved chemical additives which provide substantial immediate improvement

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to existing treatment processes) or new or improved methods of joint treatment systems for municipal and industrial wastes, and for the purpose of reports, plans, and specifications in connection therewith.

“(b) The Secretary is authorized to make grants to persons for research and demonstration projects for prevention of pollution of waters by industry including, but not limited to, treatment of industrial waste.

“(c) Federal grants under subsection (a) of this section shall be subject to the following limitations:

“(1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary;

“(2) No grant shall be made for any project in an amount exceeding 75 per centum of the estimated reasonable cost thereof as determined by the Secretary; and

“(3) No grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration for the purpose set forth in clause (1) or (2) of subsection (a).

“(d) Federal grants under subsection (b) of this section shall be subject to the following limitations:

“(1) No grant shall be made under this section in excess of \$1,000,000;

“(2) No grant shall be made for more than 70 per centum of the cost of the project; and

“(3) No grant shall be made for any project unless the Secretary determines that such project will serve a useful purpose in the development or demonstration of a new or improved method of treating industrial wastes or otherwise preventing pollution of waters by industry, which method shall have industry-wide application.

“(e) For the purposes of this section there are authorized to be appropriated—

“(1) for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purposes set forth in subsections (a) and (b) of this section, including contracts pursuant to such subsections for such purposes;

“(2) for the fiscal year ending June 30, 1967, and for each of the next two succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in clause (2) of subsection (a); and



“(3) for the fiscal year ending June 30, 1967, and for each of the next two succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in subsection (b).”

(b) Section 5 of such Act is amended by adding at the end thereof the following new subsections:

“(g) (1) The Secretary shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, and encourage contributions to, a comprehensive study of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such study shall also consider the effect of demographic trends, the exploitation of mineral

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resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.

“(2) In conducting the above study, the Secretary shall assemble, coordinate, and organize all existing pertinent information on the Nation’s estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.

“(3) The Secretary shall submit to the Congress a final report of the study authorized by this subsection not later than three years after the date of enactment of this subsection. Copies of the report shall be made available to all interested parties, public and private. The report shall include, but not be limited to—

“(A) an analysis of the importance of estuaries to the economic and social well-being of the people of the United States and of the effects of pollution upon the use and enjoyment of such estuaries;

“(B) a discussion of the major economic, social, and ecological trends occurring in the estuarine zones of the Nation;

“(C) recommendations for a comprehensive national program for the preservation, study, use, and development of estuaries of the Nation, and the respective responsibilities which should be assumed by Federal, State, and local governments and by public and private interests.

“(4) There is authorized to be appropriated the sum of \$1,000,000 per fiscal year for the fiscal years ending June 30, 1967, June 30, 1968, and June 30, 1969, to carry out the purposes of this subsection.

“(5) For the purpose of this subsection, the term ‘estuarine zones’ means an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and the term ‘estuary’ means all or part of the mouth of a navigable or interstate river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.

“(h) There is authorized to be appropriated to carry out this section, other than subsection (g), not to exceed \$60,000,000 for the fiscal year ending June 30, 1968, and \$65,000,000 for the fiscal year ending June 30, 1969. Sums so appropriated shall remain available until expended.”

(c) (1) Subsection (d) of section 5 of the Federal Water Pollution Control Act is amended by striking out “(1)” and by striking out all of paragraph (2) of such subsection.

(2) The amendment made by this subsection shall take effect July 1, 1967.

SEC. 202. (a) Subsection (a) of section 7 of the Federal Water Pollution Control Act is amended by striking out “and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000” and inserting in lieu thereof “for each succeeding fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding year to and including the fiscal year ending June 30, 1971, \$10,000,000.”

(b) Subsection (a) of section 7 of the Federal Water Pollution Control Act is further amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: “including the training of personnel of public agencies.”

SEC. 203. (a) Subsection (b) of section 8 of the Federal Water Pollution Control Act is amended to read as follows:

“(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project

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pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made unless the grantee agrees to pay

the remaining cost; (4) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; and (5) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the appropriate State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs; (6) the percentage limitation of 30 per centum imposed by clause (2) of this subsection shall be increased to a maximum of 40 per centum in the case of grants made under this section from funds allocated for a fiscal year to a State under subsection (c) of this section if the State agrees to pay not less than 30 per centum of the estimated reasonable cost (as determined by the Secretary) of all projects for which Federal grants are to be made under this section from such allocation; (7) the percentage limitations imposed by clause (2) of this subsection shall be increased to a maximum of 50 per centum in the case of grants made under this section from funds allocated for a fiscal year to a State under subsection (c) of this section if the State agrees to pay not less than 25 per centum of the estimated reasonable costs (as determined by the Secretary) of all projects for which Federal grants are to be made under this section from such allocation and if enforceable water quality standards have been established for the waters into which the project discharges, in accordance with section 10 (c) of this Act in the case of interstate waters, and under State law in the case of intrastate waters.

(b) The amendment made by subsection (a) of this section shall take effect July 1, 1967.

SEC. 204. The next to the last sentence of subsection (c) of section 8 of the Federal Water Pollution Control Act is amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: "except that in the case of any project on which construction was initiated in such State after June 30, 1966, which was approved by the appropriate State water pollution control agency and which the Secretary finds meets the requirements of this section but was constructed without such assistance, such allotments for any fiscal year ending prior to July 1, 1971, shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1971, to the extent that assistance could have been provided under this section if such project had been approved pursuant to this section and adequate funds had been available. In the case of any project on which construction was initiated in such

State after June 30, 1966, and which was constructed with assistance pursuant to this section but the amount of such assistance was a lesser per centum of the cost of construction than was allowable pursuant to this section, such allotments shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1971, to the extent that assistance could have been provided under this section if adequate funds had been available. Neither a finding by the Secretary that a project meets the requirements of this subsection, nor any other provision of this subsection, shall be con-

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strued to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for such project."

SEC. 205. Subsection (d) of section 8 of the Federal Water Pollution Control Act is amended by striking out "and \$150,000,000 for the fiscal year ending June 30, 1967." and inserting in lieu thereof the following: \$150,000,000 for the fiscal year ending June 30, 1967; \$450,000,000 for the fiscal year ending June 30, 1968; \$700,000,000 for the fiscal year ending June 30, 1969; \$1,000,000,000 for the fiscal year ending June 30, 1970; and \$1,250,000,000 for the fiscal year ending June 30, 1971."

SEC. 206. Section 10(d) of the Federal Water Pollution Control Act is amended by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively, and by inserting immediately after paragraph (1) the following new paragraph:

"(2) Whenever the Secretary, upon receipt of reports, surveys, or studies from any duly constituted international agency, has reason to believe that any pollution referred to in subsection (a) of this section which endangers the health or welfare of persons in a foreign country is occurring, and the Secretary of State requests him to abate such pollution, he shall give formal notification thereof to the State water pollution control agency of the State in which such discharge or discharges originate and to the interstate water pollution control agency, if any, and shall call promptly a conference of such agency or agencies, if he believes that such pollution is occurring in sufficient quantity to warrant such action. The Secretary, through the Secretary of State, shall invite the foreign country which may be adversely affected by the pollution to attend and participate in the conference, and the representative of such country shall, for the purpose of the conference and any further proceeding resulting from such conference, have all the rights of a State water pollution control agency. This paragraph shall apply only to a foreign country which the Secretary determines has given the United States essentially the same rights with respect to the prevention and control of water pollution occurring in that country

as is given that country by this paragraph. Nothing in this paragraph shall be construed to modify, amend, repeal, or otherwise affect the provisions of the 1909 Boundary Waters Treaty between Canada and the United States or the Water Utilization Treaty of 1944 between Mexico and the United States (59 Stat. 1219), relative to the control and abatement of water pollution in waters covered by those treaties."

SEC. 207. Section 10 (d) (3) of the Federal Water Pollution Control Act (as redesignated by this Act) is amended by inserting after the first sentence thereof the following: "In addition, it shall be the responsibility of the chairman of the conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference."

SEC. 208. (a) Section 10 of the Federal Water Pollution Control Act is further amended by adding at the end thereof the following new subsection:

"(k) (1) At the request of a majority of the conferees in any conference called under this section the Secretary is authorized to request any person whose alleged activities result in discharges causing or contributing to water pollution, to file with him a report (in such form as may be prescribed in regulations promulgated by him) based on existing data, furnishing such information as may reasonably be requested as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

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"(2) If any person required to file any report under this subsection shall fail to do so within the time fixed by regulations for filing the same, and such failure shall continue for thirty days after notice of such default, such person may, by order of a majority of the conferees, be subject to a forfeiture of \$100 for each and every day of the continuance of such failure which forfeiture shall be payable into the Treasury of the United States and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may upon application therefor remit or mitigate any forfeiture provided for under this subsection and he shall have authority to determine the facts upon all such applications.

"(3) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures."

(b) Subsection (f) of section 10 of the Federal Water Pollution Control Act is amended (1) by striking out “(f)” and inserting in lieu thereof “(f) (1),” (2) by inserting immediately after the third sentence thereof the following: “It shall be the responsibility of the Hearing Board to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the Hearing Board.”, and (3) by adding at the end thereof the following new paragraphs:

“(2) In connection with any hearing called under this section the Secretary is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution to file with him, in such form as he may prescribe, a report based on existing data, furnishing such information as may reasonably be required as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. Such report shall be made under oath or otherwise, as the Secretary may prescribe, and shall be filed with the Secretary within such reasonable period as the Secretary may prescribe, unless additional time be granted by the Secretary. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

“(3) If any person required to file any report under paragraph (2) of this subsection shall fail to do so within the time fixed by the Secretary for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of \$100 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may upon application therefor remit or mitigate any forfeiture provided for under this paragraph and he shall have authority to determine the facts upon all such applications.

“(4) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.”

SEC. 209. Paragraph (f) of section 13 of the Federal Water Pollution Control Act is amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: “and an Indian tribe or an authorized Indian tribal organization.”

SEC. 210. The Federal Water Pollution Control Act, as amended, is amended by renumbering existing section 16 as section 19 and by adding immediately after section 15 the following new sections:

"SEC. 16. (a) In order to provide the basis for evaluating programs authorized by this Act, the development of new programs, and to furnish the Congress with the information necessary for authorization of appropriations for fiscal years beginning after June 30, 1968, the Secretary, in cooperation with State water pollution control agencies and other water pollution control planning agencies, shall make a detailed estimate of the cost of carrying out the provisions of this Act; a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and a comprehensive analysis of the national requirements for and the cost of treating municipal, industrial, and other effluent to attain such water quality standards as established pursuant to this Act or applicable State law. The Secretary shall submit such detailed estimate and such comprehensive study of such cost for the five-year period beginning July 1, 1968, to the Congress no later than January 10, 1968, such study to be updated each year thereafter.

"(b) The Secretary shall also make a complete investigation and study to determine (1) the need for additional trained State and local personnel to carry out programs assisted pursuant to this Act and other programs for the same purpose as this Act, and (2) means of using existing Federal training programs to train such personnel. He shall report the results of such investigation and study to the President and the Congress not later than July 1, 1967.

"SEC. 17. The Secretary of the Interior shall, in consultation with the Secretary of the Army, the Secretary of the department in which the Coast Guard is operating, the Secretary of Health, Education, and Welfare, and the Secretary of Commerce, conduct a full and complete investigation and study of the extent of the pollution of all navigable waters of the United States from litter and sewage discharged, dumped, or otherwise deposited into such waters from watercraft using such waters, and methods of abating either in whole or in part such pollution. The Secretary shall submit a report of such investigation to Congress, together with his recommendations for any necessary legislation, not later than July 1, 1967.

"SEC. 18. The Secretary of the Interior shall conduct a full and complete investigation and study of methods for providing incentives designed to assist in the construction of facilities and works by industry designed to reduce or abate water pollution. Such study shall include, but not be limited to, the possible use of tax incentives as well as other methods of financial assistance. In carrying out this study the Secretary shall consult with the Secretary of the Treasury

as well as the head of any other appropriate department or agency of the Federal Government. The Secretary shall report the results of such investigation and study, together with his recommendations, to the Congress not later than January 30, 1968."

SEC. 211. (a) The Oil Pollution Act, 1924 (43 Stat. 604; 33 U.S.C. 431 et seq.), is amended to read as follows: "That this Act may be cited as the 'Oil Pollution Act, 1924.'

"SEC. 2. When used in this Act, unless the context otherwise requires—

"(1) 'oil' means oil of any kind or in any form, including fuel oil, sludge, and oil refuse;

"(2) 'person' means an individual, company, partnership, corporation, or association; any owner, operator, master, officer, or employee of a vessel; and any officer, agent or employee of the United States;

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"(3) 'discharge' means any grossly negligent, or willful spilling, leaking, pumping, pouring, emitting, or emptying of oil;

"(4) 'navigable waters of the United States' means all portions of the sea within the territorial jurisdiction of the United States, and all inland waters navigable in fact; and

"(5) 'Secretary' means the Secretary of the Interior.

"SEC. 3. (a) Except in case of emergency imperiling life or property, or unavoidable accident, collision, or stranding, and except as otherwise permitted by regulations prescribed by the Secretary as hereinafter authorized, it is unlawful for any person to discharge or permit the discharge from any boat or vessel of oil by any method, means, or manner into or upon the navigable waters of the United States, and adjoining shorelines of the United States.

"(b) Any person discharging or permitting the discharge of oil from any boat or vessel, into or upon the navigable waters of the United States shall remove the same from the navigable waters of the United States, and adjoining shorelines immediately. If such person fails to do so, the Secretary may remove the oil or may arrange for its removal, and such person shall be liable to the United States, in addition to the penalties prescribed in section 4 of this Act, for all costs and expenses reasonably incurred by the Secretary in removing the oil from the navigable waters of the United States, and adjoining shorelines of the United States. These costs and expenses shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in rem.

"(c) The Secretary may prescribe regulations which—

"(1) permit the discharge of oil from boats or vessels in such



quantities under such conditions, and at such times and places as in his opinion will not be deleterious to health or marine life or a menace to navigation, or dangerous to persons or property engaged in commerce on navigable waters of the United States; and

“(2) relate to the removal or cost of removal, or both, of oil from the navigable waters of the United States, and adjoining shorelines of the United States.

“SEC. 4. (a) Any person who violates section 3(a) of this Act shall, upon conviction thereof, be punished by a fine not exceeding \$2,500, or by imprisonment not exceeding one year, or by both such fine and imprisonment for each offense.

“(b) Any boat or vessel other than a boat or vessel owned and operated by the United States from which oil is discharged in violation of section 3(a) of this Act shall be liable for a penalty of not more than \$10,000. Clearance of a boat or vessel liable for this penalty from a port of the United States may be withheld until the penalty is paid. The penalty shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in rem in the district court of the United States for any district within which such boat or vessel may be.

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“SEC. 5. The Commandant of the Coast Guard may, subject to the provisions of section 4450 of the Revised Statutes, as amended (46 U.S.C. 239), suspend or revoke a license issued to the master or other licensed officer of any boat or vessel found violating the provisions of section 3 of this Act.

“SEC. 6. In the administration of this Act the Secretary may, with the consent of the Commandant of the Coast Guard or the Secretary of the Army, make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel, employed by the Coast Guard or the Department of the Army, respectively, for the preservation and protection of navigable waters of the United States. For the better enforcement of the provisions of this Act, the officers and agents of the United States in charge of river and harbor improvements and persons employed under them by authority of the Secretary of the Army, and persons employed by the Secretary, and officers of the Customs and Coast Guard of the United States shall have the power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of such provisions, except that no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid persons. Whenever any

arrest is made under the provisions of this Act the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him, and such commissioner, judge or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.

“SEC. 7. This Act shall be in addition to other laws for the preservation and protection of navigable waters of the United States and shall not be construed as repealing, modifying, or in any manner affecting the provisions of such laws.”

(b) The amendment made by subsection (a) of this section shall take effect on the thirtieth day which begins after the date of enactment of this Act.

Approved November 3, 1966.

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### 1.2j(1) HOUSE COMMITTEE ON PUBLIC WORKS

H.R. REP. No. 2021, 89th Cong., 2d Sess. (1966)

#### WATER POLLUTION CONTROL ACT OF 1966

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SEPTEMBER 9, 1966.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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Mr. BLATNIK, from the Committee on Public Works, submitted the following

#### REPORT

together with

#### SUPPLEMENTARY AND ADDITIONAL VIEWS

[To accompany H.R. 16076]

The Committee on Public Works, to whom was referred the bill (H.R. 16076) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert a substitute text which is printed in the reported bill in italic type.

## THE BILL AT A GLANCE

- Would provide \$2.45 billion for sewage treatment plants through June 30, 1971;
- Would double the present dollar limitations on grants for smaller projects from \$1.2 to \$2.4 million and for projects serving two or more communities from \$4.8 to \$9.6 million;
- Would add an additional 10 percent to the present 30 percent Federal grant, making a total of 40 percent if the States contribute 30 percent;
- Would establish a new concept of incentive grants amounting to 10 percent for the development of basin plans for water pollution control;
- Would increase the total Federal grant by another 10 percent, or up to 50 percent under the basin plan, if the States matched to the extent of 25 percent of the total costs;

[p. 1]

- Would provide \$228 million for research through June 30, 1969;
- Would authorize financial help to the States in preparing basin plans;
- Would provide reimbursement for projects starting after June 30, 1966;
- Would authorize studies of cost estimates, additional State personnel, financial assistance to industry, research on industrial wastes, and estuaries;
- Would make other minor provisions.

With respect to construction grants, the amount in the bill (\$2.45 billion) is exactly the same as the amount requested by the administration through the fiscal year 1971. The figures which have generally been used for comparison with the amount contained in this bill (approximately \$3½ billion for the administration proposal bill and \$6 billion for the Senate bill) are not comparative, since they include approximately \$1 billion for an additional year in the administration bill and \$1½ billion for an additional year in the Senate bill.

## FORMAT OF THE REPORT

This report explains the action taken by the committee on the bill, H.R. 16076, and the reasons for this action. The bill itself is divided into two titles. Title I of the bill is a new title II of the Water Pollution Control Act, the "clean rivers restoration program." Title II of the bill consists of a series of amendments to the existing Federal Water Pollution Control Act which is designated as title I. Because of the cross-references in the bill and the existing law to existing sections, subsections, sentences, and clauses of the existing act, a section

index of the bill is included toward the end of the report to assist in tracing the specific amendments.

A summary of the bill immediately follows this format. The summary covers the total construction grants provided by the bill; the new incentive programs resulting from the adoption of the concept of an "approved basin plan" in the "clean rivers" portion and the relationship of these incentive grants to requirements of matching State contributions; an outline of the procedures for obtaining approval of the basin plans; and a brief explanation of the more important remaining provisions in the bill identified by separate headings.

The main body of the report includes a more detailed explanation of the bill following generally the outline indicated in the summary. The views of the committee and its reasons for adopting the bill in its present form are given under each heading. The usual information concerning the Federal costs, hearings, and agency comments follow the main body of the report. The final portion of the report is the basic law, as amended, required under clause 3 of Rule XIII of the Rules of the House of Representatives.

Supplementary views of members of the committee follow the report.

### SUMMARY

#### PURPOSE

The bill would amend the Federal Water Pollution Control Act by providing for the development of basin pollution control and abatement plans through the establishment of additional incentives; by increasing grants under the existing program for waste treatment; and

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by making certain other provisions. The specific features are summarized as follows:

#### *Total construction grants*

<i>Fiscal year ending June 30:</i>	<i>Amount</i>
1967 . . . . .	<sup>1</sup> \$150,000,000
1968 . . . . .	300,000,000
1969 . . . . .	400,000,000
1970 . . . . .	650,000,000
1971 . . . . .	950,000,000
<b>Total . . . . .</b>	<b>2,450,000,000</b>

<sup>1</sup> Already authorized in existing law.

#### INDIVIDUAL PROJECT GRANTS

The principal modifications in the existing 30-percent Federal construction grant program are:

An increase in the maximum grants from \$1.2 to \$2.4 million for an individual project, and from \$4.8 to \$9.6 million for a project serving two or more municipalities, or 30 percent, whichever is less. Under present law the dollar limitations are removed and the Federal Government contributes 30 percent, if the State contributes 30 percent to all projects in the State funded with Federal grants under this program from the same allocation; under the bill the dollar limitations would still be removed, but the 30-percent Federal grant would be increased to 40 percent if the State made this 30-percent contribution.

#### INCENTIVE GRANTS FOR PROJECTS IN APPROVED BASIN PLAN

If a project is a part of an approved plan for water pollution control and abatement in a river basin, coastal waters, bays, lakes, etc., it is eligible for an incentive grant of 10 percent above the basic 30-percent grant provided in existing law, with no dollar limitation. The Federal grant would then be 40 percent. The grant may be increased by another 10 percent, making a total of 50 percent, if the State agrees to contribute 25 percent for all projects under this program from the same allocation.

#### SUMMARY OF GRANTS

[In percent]

Cost-sharing	Not part of approved basin plan		Part of approved basin plan	
	No State matching	State matching	No State matching	State matching
Federal .....	<sup>1</sup> 30	40	40	50
State .....	0	30	0	25
Local .....	70	30	60	25
Totals .....	100	100	100	100

<sup>1</sup> Limited to \$2,400,000 for a single municipality or \$9,600,000 for two or more combined.

#### PROCEDURES FOR OBTAINING APPROVAL OF BASIN PLANS

The Governor or Governors of the States in the basin, through the establishment or designation of a planning agency, or otherwise, would prepare a comprehensive pollution control and abatement plan which would be submitted to the Secretary of Interior for approval.

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This plan would be transmitted by the Secretary to the Secretary of Housing and Urban Development and to the Water Resources Council. Upon receipt of their comments, which are to be made within 60 days, the Secretary will, if he approves it, transmit it together with

his recommendations and the comments, to Congress for approval.

Further details with respect to the procedures are as follows:

(1) *More than one State*.—If the basin includes more than one State, at least 50 percent of the Governors in that basin must agree to submit a plan;

(2) *Interstate agency*.—If an interstate agency develops a plan for the area under its control, that agency would submit the plan to the Secretary;

(3) *Upper Colorado and Columbia Basins*.—In the case of the Upper Colorado River Basin, the Governors of at least three of the four States of Colorado, New Mexico, Utah, and Wyoming must agree. In the case of the Columbia River Basin, the Governors of at least three of the four States of Idaho, Montana, Oregon, and Washington must agree.

(4) *Tennessee and Delaware Rivers*.—In the case of the Tennessee and Delaware Rivers, the Tennessee Valley Authority and the Delaware River Basin Commission may develop a plan and transmit it directly to Congress for approval.

#### OTHER PROVISIONS

*Administrative expenses*.—The Secretary of Interior is authorized to pay up to 50 percent of the administrative expenses incurred by planning agencies designated by the Governor or Governors in preparing basin pollution control and abatement plans.

*Research and development*.—The bill merges the research and development authority of section 6 with section 5 of the Federal Water Pollution Control Act.

1. *Industry*.—It provides for grants to persons for research and demonstration projects for prevention of pollution of water by industry, including but not limited to the treatment of industrial waste. No grant shall be made for more than 70 percent of the cost of the project, except that the maximum grant for any project is limited to \$1 million.

2. *Estuaries*.—Appropriations of \$1 million per fiscal year for the fiscal years ending June 30, 1967, 1968, and 1969, are authorized for a comprehensive study of the effects of pollution in the estuaries of the United States on fish and wildlife, recreation, water supply and water power and on other beneficial purposes. The report must be submitted not later than 3 years after enactment of the bill.

3. *Appropriations for research*.—The amount authorized to be appropriated for all research and development, exclusive of the estuarine study, is \$75 million per fiscal year for each of the 3 fiscal years beginning with the fiscal year ending June 30, 1967.

Not less than 25 percent of the amount appropriated shall be used for the industrial pollution studies each fiscal year. The total authorization for research appropriations, including the estuarine study, is \$228, million or \$76 million per year for the fiscal years 1967, 1968, and 1969.

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*Cost estimate and study.*—The bill authorizes the Secretary to make a study in cooperation with various pollution control agencies of the estimated costs of the Federal pollution control program, the economic impact on affected units of government of the costs of installing waste treatment works, and the national requirements for and cost of treating wastes to meet water quality standards established under the Federal Water Pollution Control Act. The initial study would cover a 3-year period beginning July 1, 1968. The initial study must be submitted to Congress by January 10, 1968, and updated each year thereafter.

*Training of State and local personnel.*—The bill directs the Secretary to make a study of the need of additional State and local personnel to carry out pollution control programs and the use of existing Federal training programs to train such people. The results of the study shall be transmitted to the President and Congress by July 1, 1967.

*Program grants.*—The bill increases the authorization, essentially for planning grants, to States and interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution from \$5 million through the fiscal year 1968 authorized under present law to \$10 million for the fiscal years 1968 and 1969, a total increase of \$15 million.

*Reimbursement.*—Reimbursement is authorized for expenditures made in advance of the availability of funds for a grant if the Secretary approves the project prior to commencement of construction. Such retroactive grant requires that the same provisions apply as would apply if the grant was being made for future construction.

The approval of the project by the Secretary prior to construction, or the making of a grant for future payment, shall not be construed to constitute any obligation on the part of the United States. The provision applies to projects where construction is initiated after June 30, 1966. For projects initiated between June 30, 1966, and the date of enactment of the bill, the Secretary may approve the project subsequent to commencement of construction.

*Hearing Board.*—The bill provides that the Hearing Board shall give every person contributing to the alleged pollution or affected by

it an opportunity to make a full statement of his views. It also authorizes the Secretary to require a report from persons whose alleged activities result in pollution, provided that no trade or secret processes shall be divulged. Upon failure to file such report the person shall be subject to a fine of \$100 per day.

*Oil Pollution Act of 1924.*—The bill transfers the administration of the 1924 Oil Pollution Act from the Secretary of the Army to the Secretary of the Interior.

*Study of additional financial assistance to industry.*—The bill authorizes a study of the use of tax incentives as well as other methods of financial assistance to industry. In carrying out this study the Secretary shall consult with the Secretary of the Treasury, as well as the head of any other appropriate department or agency of the Federal Government.

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## SUMMARY OF AUTHORIZATIONS

Fiscal year ending June 30—	Construction grants	Research grants	Program grants	Total
1967 .....	<sup>1</sup> \$150,000,000	\$76,000,000	<sup>1</sup> \$5,000,000	\$231,000,000
1968 .....	300,000,000	76,000,000	<sup>2</sup> 10,000,000	386,000,000
1969 .....	400,000,000	76,000,000	10,000,000	486,000,000
1960 .....	650,000,000			650,000,000
1971 .....	950,000,000			950,000,000
Total .....	2,450,000,000	228,000,000	25,000,000	2,703,000,000
Authorized by existing law .....	150,000,000	<sup>3</sup> 228,000,000	10,000,000	388,000,000
Increase in authorization in H.R. 16076 .....	2,300,000,000	0	15,000,000	2,315,000,000

<sup>1</sup> Authorized by existing law.

<sup>2</sup> \$5,000,000 authorized by existing law.

<sup>3</sup> Certain research items have a combined authorization ceiling in existing law of \$105,000,000 but there is no authorization ceiling for the research program as a whole. For the purpose of this table, the entire \$228,000,000 is considered to be already authorized.

## GENERAL STATEMENT

In the history of the development of our water resources for the benefit of man, pollution control is the latest and one of the most difficult problems which the country has had to face. It is the only problem in the water field which has resulted from man's misuse of his inheritance. All the other problems were challenges to man's ingenuity to make better use of those resources which were given to him. In so doing, solutions he has arrived at resulted in an improvement of the resource and he has not had to be concerned, except in special cases, by the side effects.

The problem he is now encountering is one which involves undoing the wrong he has done, partly through carelessness and lack of foresight and partly through conditions beyond his control. He has permitted this problem to assume gigantic proportions, calling not for



crash programs but for programs accelerated beyond anything which he has yet undertaken.

In the beginning of the country our rivers served the early settlers by providing a means of transportation for goods and people. To make them better serve this purpose, channels and harbors were dredged, canals were excavated, and locks and dams were constructed to overcome the obstacles of topography. The improvement of rivers and harbors has been going on since 1824.

The next use to which our waters were put by the Federal Government was the supply of irrigation water to the arid lands of the West, which began with the Reclamation Act of 1902. It was not until 1917 that the first flood control project was entered into by the Federal Government in an attempt to control hydraulic mining debris in the Sacramento River. This was not of national significance, but 10 years later, as a result of the great floods on the Mississippi River, a plan was developed which had to be sponsored by the Federal Government, since it involved so many States, for the control of the Mississippi River. It was not until 1936, however, that the Congress passed legislation recognizing as a national policy the control of destructive floods on the rivers of the country.

These problems of water were met as they arose; pollution is a late-comer. During the early years of this period, the pollution of our streams was no problem because of the smaller population, the lesser

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industrial development, and the clean rivers available to carry waste to the ocean.

The germ of the problem was there, however, and it grew by leaps and bounds. Legislative efforts to meet this problem are outlined in some detail later in this report. Briefly, the first determined water pollution control legislation was passed in 1956, but it was admittedly a feeble step in combating an ever-mounting evil although the best that could be done at the time.

Measures to prevent the ever-accelerating pollution were gentle at best, and the amount of money appropriated for Federal assistance was hardly more than a token. In 1961 a greater step was taken through the passage of amendments to the original act, and, finally, in 1965, only last year, a vigorous thrust was undertaken by the passage of the 1965 amendments to the Water Pollution Control Act.

This bill is a further step in making our waters reusable.

The President painted the picture last month when he said:

This is water that could be used and reused, if treated properly. Today it is ravaged water—a menace to the health. It

flows uselessly past water-hungry communities to an indifferent sea.

Water reuse is nothing new. It is practiced on a large scale today. Some water in almost every stream is used one or more times. People often shudder at the idea of reusing water, not realizing that in most cities and towns today such reuse is a part of our urban civilization. In other older and more crowded countries, the problems which we are facing in this respect were faced long ago and solved. A good example has been brought back by Representative Robert E. Jones who represented the committee on a recent Presidential mission to Germany. The information which he procured, and which is incorporated in a report "Natural Resources Mission to Germany," dated May 9, 1966, was of great interest to the committee. Senator Muskie represented the Senate Public Works Committee, and Secretary of the Interior Udall headed the mission.

With respect to the reuse of water, the committee was told that the Ruhr River in Germany has been developed for municipal and industrial water supply and is maintained under a master plan which was begun in 1914. It consists of 14 reservoirs and dams to assure adequate water supply during low-rainfall periods and 104 treatment plants for waste purification. The system does not depend upon any novel technological application but rather upon the careful formulation and coordination of the units in the plan. This probably will be the road which the United States must continue to follow, although the committee also noted with interest that Germany has experimented with specialized solutions to certain local problems, such as that started in 1904 on the Emscher River. The problem involved a disruption of flow because of localized mine subsidence, the discharge of raw sewage by towns, and manufacturing wastes by industries, which had turned it into a vast waste-clogged swamp. Because the Ruhr River runs parallel to the Emscher, water supplies for municipal and industrial use could be obtained from the Ruhr River and from deep wells. Accordingly, planners proceeded to convert the Emscher into a drainage stream. Its course was altered, its streambed was raised and lined with concrete, and its banks

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landscaped. The net effect: a river completely managed for waste disposal.

There may or may not be areas in the United States which can be treated similarly. The scheme sounds almost as though it were a last resort, and it may not be required in particular areas of this country for some years to come. However, imagination must be an essential part of the planners' vision in trying out all possible devices for

solving this problem, particularly in the heavily industrialized areas.

The committee recognizes that the imagination necessary to accomplish the job must be encouraged and developed and this bill is intended to do that. Undoubtedly there will be additional bills in future years but this bill, the fourth major effort so far, is the first to attack the problem with the amounts of money commensurate with the size of the job.

A paragraph from the remarks of Representative Blatnik at the opening of the hearings may well be used to close this general statement.

The Federal program of water pollution control, which the Congress authorized just ten years ago in Public Law 660, the Federal Water Pollution Control Act, has had an impressive impact. The strengthening 1961 amendments and the far-reaching Water Quality Act of 1965 have greatly assisted in putting all users of water on notice as to their responsibility for keeping our waters clean. The effectiveness of the present program can be seen by the fact that those who have an interest in keeping our Nation's waters clean, and this includes Federal, State, and local governments, private industry and all citizens of our Nation, are finally coming to realize that the handwriting is on the wall. There must be and there will be an end to the befouling and degradation of our greatest natural asset—pure water.

The committee hopes that the bill will be acted upon favorably and rapidly by the Congress. It contains, in the judgment of the committee, those features which are now necessary to accelerate as much as possible the water pollution control program. It increases the Federal participation more than seven times. It introduces a new concept of incentives which will move the program forward that much faster.

The significance of these features and the reasons for the inclusion of a number of other items of a less sweeping nature are explained in some detail in this report. In this connection, it may be helpful to list the four major bills or proposals considered by the committee in its deliberations and the background of previous legislation.

#### MAJOR PENDING BILLS

The administration bill as originally proposed was introduced on February 20, 1966, by Mr. Fallon, as chairman of the committee, as H.R. 13104, and by Senator Muskie, as chairman of the Senate Public Works Committee, on the same date, as S. 2987.

The bill, S. 2947, reported by the Senate Committee on Public Works, was actually an earlier bill introduced by a number of Senators on February 18, 1966. This bill was reported on July 11, 1966,

and passed the Senate on July 14, 1966.

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The bill, H.R. 16076, was originally introduced by Mr. Blatnik on June 30, 1966, and it is this bill which has been amended and reported by this committee.

Another version of the administration bill was submitted by letter July 20, 1966, from the Department of the Interior after the committee hearings.

#### LEGISLATIVE BACKGROUND

A brief summary of the background of water pollution legislation to date may be helpful in understanding the report.

Prior to 1955, water pollution control legislation was limited. Until the enactment of the Federal Water Pollution Control Act of 1948, the only role the Federal Government had in water pollution control was contained in three acts: The River and Harbor Act of 1899, the Public Health Service Act of 1912, and the Oil Pollution Act of 1924.

The Water Pollution Control Act of 1948 was experimental and limited to a trial period of 5 years, but was subsequently extended to June 30, 1956. On July 9, 1956, after more than a year of deliberation, there was enacted into law the first comprehensive Federal Water Pollution Control Act. This is commonly known as Public Law 660 of the 84th Congress, sponsored by Representative John A. Blatnik who is generally considered to be the father of water pollution control legislation, since he also sponsored on the House side all subsequent legislation on the subject. Among its provisions were (1) grants to assist States and interstate agencies for water pollution control activities; (2) Federal grants of \$50 million a year (up to an aggregate of \$500 million) for the construction of municipal sewage treatment works; and (3) a permanent procedure governing Federal abatement action against interstate pollution.

Proposals to amend the Federal Water Pollution Control Act to provide for a still more effective program of water pollution control were introduced early in the 1st session of the 87th Congress and received the endorsement of the President in his message on natural resources on February 23, 1961. The Congress enacted and the President signed into law the Federal Water Pollution Control Act Amendments on July 20, 1961. The amendments did much to (1) strengthen abatement enforcement of interstate and navigable waters; (2) increase Federal assistance to municipalities for construction of waste treatment works by increasing the grant authorization to \$80 million in 1962, \$90 million in 1963, and \$100 million for each of the fiscal years 1964-67; (3) give recognition to the research needs by

authorizing accelerated activities and funds; and (4) stimulate the multiple use of storage reservoirs by authorizing the inclusion of capacity in federally constructed reservoirs for regulating stream-flow for the purpose of water quality control.

The Water Quality Act of 1965 increased the grants to \$150 million for the fiscal years 1966 and 1967. In addition, it strengthened the program so greatly that it is generally considered to be the principal guide in Federal participation in water pollution control. The new bill is not intended in any way to detract from the strength of the 1965 act but rather to supplement it and to provide more details where they are needed.

The 1965 act provided for the creation of the Federal Water Pollution Control Administration in the Department of Health, Education,

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and Welfare. These activities had formerly been handled by the Public Health Service, and the upgrading was desirable to strengthen the Federal program. (Since then the program has been transferred to the Department of the Interior under Presidential Reorganization Plan No. 2 of 1966 in a further effort to give it the prominence and support which it deserves.) The act included expanded research, particularly in the field of developing projects which would demonstrate new or improved methods of controlling waste discharges from storm sewers or combined storm and sanitary sewers. It doubled the dollar limitation on grants for construction of waste treatment works from \$600,000 to \$1,200,000 for an individual project, and from \$2.4 to \$4.8 million for a joint project in which two or more communities participate. The removal of the dollar limitations up to a full 30 percent of the project costs was authorized if the State matched the full Federal contribution. It further provided for an increase in the basic grant of an additional 10 percent of the amount of the grant if the project conformed to a comprehensive plan for a metropolitan area.

One of the most important provisions was that each State must file a letter of intent with the Secretary by October 2, 1966, that the State would establish water quality criteria applicable to interstate waters on or before June 30, 1967. Failure to do so results in the Secretary establishing Federal standards for such water.

Finally, it provided for a stronger enforcement program than had previously been in effect.

The committee wishes to emphasize particularly that H.R. 16076 is not intended to change the procedures established in the Water Quality Act of 1965, except as specifically provided. It is intended to supplement the authority basically granted in that act and to

provide more tools by which these procedures can be carried out.

#### WHAT IS WATER POLLUTION?

Before proceeding to the details of the report it might be well to define the word "pollution." It has different meanings for different people. To some it is raw sewage with its attendant repugnance. To others it is the chemical poisons that make it dangerous to go swimming in our rivers and lakes. To the sportsman it may be the increase in temperature of the water which has been used for cooling purposes, and which, as a result, drives away game fish like trout or bass.

The component sources were noted in a report of the Senate Public Works Committee, which was prepared with the assistance of the Public Health Service, and is entitled "A Study of Pollution—Water," dated June 1963, of the 88th Congress, 1st session. The sources are given as follows:

- (1) Organic wastes contributed by domestic sewage and industrial wastes of plant and animal origin which remove oxygen from the water through decomposition;
- (2) Infectious agents contributed by domestic sewage and by certain kinds of industrial wastes which may transmit disease;
- (3) Plant nutrients which promote nuisance growths of aquatic plant life such as algae and water weeds;

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- (4) Synthetic-organic chemicals such as detergents and pesticides resulting from new chemical technology which are toxic to aquatic life and potentially to humans;

- (5) Inorganic chemicals and mineral substances resulting from mining, manufacturing processes, oil plant operations and agricultural practices which interfere with natural stream purification, destroy fish and aquatic life, cause excessive hardness of water supplies, produce corrosive effects and in general add to the cost of water treatment;

- (6) Sediments which fill stream channels, harbors and reservoirs, cause erosion of hydroelectric power and pumping equipment, affect the fish and shellfish population by blanketing fish nests, spawn and food supplies, and increase the cost of water treatment;

- (7) Radioactive pollution resulting from the mining and processing of radioactive ores, from the use of refined radioactive materials, and from fallout following nuclear testing; and

- (8) Temperature increases which result from the use of water for cooling purposes by steam electric powerplants, and industries and from impoundment of water in reservoirs, and which

have harmful effects on fish and aquatic life, and reduce the capacity of the receiving water to assimilate wastes.

Most wastes are mixtures of the above general categories of pollutants, thereby complicating the problems of their treatment and control. For example, municipal wastes usually contain synthetic organic chemicals, inorganic chemicals, and sediments, as well as oxygen consuming organic wastes and infectious agents. Many industrial wastes contain substantial amounts of heat from processes other than cooling. Land drainage usually contains substantial organic matter in addition to sediments; as well as radioactive substances and air pollutants washed from sky, vegetation, buildings, and streets during rainfall.

It is obvious there are many potential sources of waste which may cause pollution. Whether pollution exists, however, depends on the actual water quality, for pollution is an impairment of quality such that it interferes with the intended usages.

#### THE CONSTRUCTION GRANT PROGRAM

The first major Federal Water Pollution Control Act in 1956 was an innovation, because it moved the Federal government into an area that formerly had been the concern of cities and local communities. The role of the Federal government, however, particularly in making grants available, was a walk-on part in a huge drama, and a hesitating one at that.

The first authorization for grants amounted to \$50 million a year (up to an aggregate of \$500 million) for the construction of municipal sewage treatment works. The 1961 amendments increased the amounts to \$80 million in 1962, \$90 million in 1963, and \$100 million for each of the fiscal years from 1964 to 1967. The 1965 act raised the amounts for the fiscal years 1966 and 1967 to \$150 million. The total construction grant authorization through this year, therefore, has been \$820 million over a 10-year period. This has done the work it was intended to do; it has helped build the sewage treatment plants

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it was supposed to; but it has not let us keep up with the problem. This is not intended to downgrade previous legislation. The amendments of 1961, and more particularly the act of 1965, were aggressive insofar as the role of the Federal Government was concerned in planning and in enforcement, but they did not provide sufficient financial assistance.

The financial assistance in this bill is a frank admission that large sums are going to be needed in the future if the problem is to be coped with adequately. The amounts in the bill are based upon the best

judgment of the committee after its consideration of all factors, including the physical capability of utilizing appropriations over the next few years.

The authorizations for construction grants in the bill are shown in the following table:

*Total construction grants*

Fiscal year ending June 30:	Amount
1967 . . . . .	<sup>1</sup> \$150,000,000
1968 . . . . .	300,000,000
1969 . . . . .	400,000,000
1970 . . . . .	650,000,000
1971 . . . . .	950,000,000
Total . . . . .	2,450,000,000

<sup>1</sup> Already authorized in existing law.

The bill originally proposed by the administration, introduced February 28, 1965, as H.R. 13104, made no provision for extending the authorizations for appropriations for the existing grant program beyond that already authorized in existing law. H.R. 13104 did, however, provide for an authorization of \$50,000,000 for fiscal year 1967 to begin the proposed "Clean Rivers" program, and provided no limits on future appropriations. The bill as passed the Senate on July 14, 1966, S. 2947, provided a total of \$6 billion for the 6-year period 1967–72, of which \$150 million is the amount already authorized for fiscal year 1967. The original bill introduced by Mr. Blatnik, H.R. 16076, on June 30, 1966, contains the same amounts provided in the Senate bill. Another version of the administration bill was submitted by letter of July 20, 1966, from the Department of the Interior after the committee hearings of July 12 to July 14 in which the total amount for construction grants was \$3.45 billion for the 6-year period 1967–72, including \$200 million for the fiscal year 1967, which is \$50 million above the amount already covered by existing law for that year. As shown in the previous table, the committee bill contains \$2.45 billion for the 5-year period 1967–71, including the \$150 million already authorized. This is 1 year less than both the administration and the Senate bills.

A comparison of the bills by years is shown in the following table.

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## WATER POLLUTION CONSTRUCTION GRANT AUTHORIZATION PROPOSED IN VARIOUS BILLS CONSIDERED

Fiscal year ending June 30—	H.R. 13104 (1st adminis- tration bill)	H.R. 16067 as introduced and S. 2947 as passed Senate	Revised ad- ministration proposal (by Department of Interior)	H.R. 16076 as reported by committee
1967 <sup>1</sup> .....	<sup>1</sup> \$200,000,000	<sup>1</sup> \$150,000,000	<sup>1</sup> \$200,000,000	<sup>1</sup> \$150,000,000
1968 .....	Unlimited	600,000,000	250,000,000	300,000,000
1969 .....	Unlimited	1,000,000,000	400,000,000	400,000,000
1970 .....	Unlimited	1,250,000,000	650,000,000	650,000,000
1971 .....	Unlimited	1,500,000,000	950,000,000	950,000,000
1972 .....	Unlimited	1,500,000,000	1,000,000,000	...
Total .....	Unlimited	6,000,000,000	3,450,000,000	2,450,000,000

<sup>1</sup> \$150,000,000 already authorized by existing law.

It should be noted that the administration in its second request increased the existing authorization for the fiscal year 1967 from \$150 to \$200 million and proposed an authorization for the fiscal year 1968 of \$250 million. The committee has retained the present authorization of \$150 million for the fiscal year 1967 but has increased the authorization for the fiscal year 1968 to \$300 million, which results in the total for the 2 years being the same in each proposal.

The amounts in the present bill represent the committee's judgment as to appropriate annual authorizations for the 5 fiscal years from 1967 to 1971. In comparison with the same 5-year period, the other bills would have provided amounts as shown in the following table:

*Comparison of bills based on 5-year period (1967-71)*

H.R. 13104 .....	Unlimited
H.R. 16067 as introduced and S. 2947 as passed Senate .....	4,500,000,000
H.R. 16067 as reported by committee, and in revised administration proposal .....	2,450,000,000

The problem the committee faced in settling upon an amount for construction grants is one which was faced by the administration in its original proposal and in its revised plan submitted as a result of the hearings held by the committee. It is the same problem that the Senate faced in deciding upon the total amount of construction grants to be authorized for a period of half a dozen years ahead. The original administration request did not extend the authorization for the existing grant program.

The revised administration proposal was explained in the testimony of the Secretary of the Interior as follows:

The initial recommendation of the President, set forth his message of last February, was that Congress enact the clean rivers legislation this year and come back next year, because the existing act has another year to run, and rewrite that legislation in light of the clean rivers legislation and the action taken and

the experience under the Water Quality Act of 1965. There was a strong feeling on the Senate side, reflected in the bill that they have reported, which will be taken up this week, that we should not wait to strengthen the existing legislation, and therefore the administration has changed its position.

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The committee has made a careful analysis in an effort to arrive at a figure which might more realistically lie in the same range as the amounts which could actually be used over the next few years. Available information indicates that there are not enough projects ready for the utilization of the sums contemplated under the Senate proposals. This is due partly to a lack of readiness in the completion of the planning, design, and specifications, and partly to the fact that even when plans are completed the financial resources of the States or the local communities are not sufficient to supply their share in a program in which the Federal Government would so markedly increase its participation. This condition will be improved, at least insofar as non-Federal financial abilities are concerned, by the bill, which, through increases in grants and through provisions of incentive grants, will decrease the burden upon the States and the communities.

The most important aspect to be considered in this entire matter is, in the opinion of the committee, the fact that undoubtedly better figures will be obtainable within the next few years. This is why a cost estimate study to be submitted by January 10, 1968, is included in the bill. If the estimate study discloses that larger amounts are needed, appropriate Federal increases can be included in future legislation.

The committee hopes that the program will be accelerated in future years, but considers that the figure of \$2.45 billion included in the bill for a 5-year period is in itself somewhat optimistic, since it actually exceeds the amounts that would be obtained if a truly mathematical projection was made of the data now available on local capacities and on the status of planning.

In summary of its position the committee feels that this is not the time for a crash program but a time for shifting into high gear.

With respect to the allocation of funds to the States, the committee feels it advisable to explain why it did not accept a provision in the administration bill which would have reserved a portion of the appropriation to be held by the Secretary of the Interior for use only on projects in the "clean river" program. The approach suggested by the administration was to reserve 75 percent (later 60 percent) of the appropriation for use only in supplying grants to projects qualified

under the "clean rivers" formula. No apportionment in this case was provided in accord with any formula for State population or per capita income, as is provided for the grants under the existing program. The committee does not look with favor on this proposition. It would grant to the Secretary complete control over the major portion of the appropriated funds which, even with the best of intentions, might not be distributed to the satisfaction of all States.

The committee sees no reason why funds for approved basin projects cannot be treated in the same way as funds for projects under the existing program, and, in the bill reported, has made no provision for a reserve to be distributed by the Secretary. Not only does this seem a much fairer and more equitable method, but it is possible that it may save the Secretary from receiving many complaints that might otherwise be engendered by the States who might think they were getting less than their share of the total appropriation.

The committee endorsed the administration proposal for accelerating clean streams by promoting basin concepts. However, the committee also recognizes that effective action will be most dependent on imaginative leadership which can reduce the problems to specifics and

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propose solutions in such a manner as to convince the citizenry of their responsibilities as well as their ultimate rewards.

Since 1956 the committee has nurtured the national awareness of the problem of pollution, its magnitude, and possible avenues of approach, as well as methods of financing. The development of State and interstate agency programs has not advanced as rapidly as might be desired; but these agencies are an integral part of the program, and their participation in the construction grant program is essential.

This is properly their function and is directly related to the public hearings now being held by State and interstate agencies in adopting criteria and plans of implementation. Familiarity of the agencies with the relative importance of problems, and their knowledge of the potential for action in solving them, coupled with the challenge to the State and interstate agencies to develop basin plans to achieve the quality standards, makes decision on priority of disbursement of funds for construction grants a rightful part of their responsibility.

#### INDIVIDUAL PROJECT GRANTS (PRESENT PROGRAM)

The bill provides for two significant changes in the existing grant program, both of which should add appreciably to the effectiveness of the water pollution control program.

The first is the doubling of the present dollar limitation on projects. Under the present law the limitation on grants is \$1.2 million

for an individual project and \$4.8 million for a project serving two or more municipalities. The bill would double these amounts, making the maximum grants for this type of project \$2.4 million for an individual treatment plant and \$9.6 million for a combined project.

Under present law the grants to this type of project cannot exceed 30 percent, and the dollar limitations come into play only when these limitations are less than 30 percent of the project cost. However, these dollar limitations are removed if the State agrees to contribute 30 percent to all projects in the State receiving grants from the same allocation. This provision is retained in the new bill.

The second significant and highly desirable change is the provision for permitting an increase in the Federal contribution from 30 to 40 percent if the State contributes 30 percent in accordance with the previous paragraph. The provision removing the dollar limitations would be retained as in existing law.

If there is no State contribution, the first provision explained above, which would double the present dollar limitation, would be important as illustrated below. A project which costs \$10 million could, under the bill, receive a maximum of \$2.4 million. Under existing law, the dollar limitation would be \$1.2 million. The community under the present law would have to pay \$8.8 million, whereas, under the new law it would have to pay \$7.6 million.

If there is a State contribution of 30 percent, the present removal of the dollar limitation reduces the local cost only when the project cost exceeds \$4 million for a single project or \$16 million for a combined project, since at those amounts the control shifts from the dollar limitation to the 30 percent Federal figure. Under the bill the control would shift, because of a higher dollar limitation and a higher Federal grant, at a level of \$8 million for a single project and \$32 million for a combined project. In the example of the \$10 million project, the

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Federal contribution would be \$4 million, and the State \$3 million, leaving the local community only \$3 million to pay. This will bring into range many of the less prosperous cities which might not be able to raise sufficient revenue for the larger amounts.

The committee recognizes difficulties larger cities have in obtaining significant Federal grants in the construction of their treatment facilities. The committee feels that the modification offered here will provide real assistance to many cities. However, the committee is also concerned about the smaller cities where the cost per capita can be several times that of larger cities. Small municipalities on small streams can create serious pollution problems. The committee does not want to see the funds distributed in such a way as to limit the

number of municipalities to just a few large cities, so the committee has retained a dollar limitation provision but has doubled it.

#### INCENTIVE GRANTS FOR PROJECTS IN APPROVED BASIN PLAN

With respect to water resource development it is recognized by all concerned that the control, disposition and use of water in a river basin must be coordinated, not only among the individual elements performing a specific function, but amongst all the functions. In formulating such a plan there must be a comprehensive plan for each of the functions, such as waste assimilation, water supply, flood control, hydroelectric power development, navigation, recreation, fish and wildlife, conservation, and other elements. After the individual functions are formulated so that each purpose is served, there must be a further fitting together of the projects so that none of the individual units, in serving its own function, interferes unduly with the performance of other units. A basin plan for water quality control, therefore, is as essential in the development of a river basin as a similar plan for the other functions.

The introduction of the concept of an approved basin plan for incentive grants under title II, clean rivers restoration plan, is new in the field of water pollution. While the engineering and economic value of a basin approach is well recognized, this is the first time in the water resource field the Federal Government has used it to stimulate State and local participation, and at the same time retained the program originally established under present law. The principle is as follows:

If a project is part of an approved plan for water pollution control and abatement in a river basin or in coastal waters, bays, lakes, etc., it is eligible for an incentive grant. State approval of priorities is applicable, as in existing law. The procedures for securing an approved basin plan are described in the next section of this report.

The incentive grant amounts to 10 percent above the basic 30-percent grant provided in existing law, or 40 percent. There is no dollar limitation. The grant may be increased by another 10 percent, making a total of 50 percent, if the State agrees to contribute 25 percent for all projects for which Federal grants are made under this program for the same allocation.

In this case, the State matching requirement has been reduced to 25 percent so that the balance to be contributed by local communities would also be 25 percent. In other words, the 30-percent State matching required for a project which is not part of a basin is arrived at by dividing the non-Federal contribution of 60 percent by 2, leaving, as

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explained before, a matching requirement of 30 percent State and 30

percent local. When the project is in a basin plan, the same principle of a 30-50 distribution between State and local community is achieved by requiring each to contribute 25 percent, because the total Federal grant in this case can be 50 percent.

The committee noted with approval that 12 States are now offering financial assistance to municipalities in construction of treatment facilities. In some instances this assistance is offered on a yearly continuing basis, and in one instance in the form of a payment based on a percentage of the original project cost but offered as a means of assisting in the financing of operation. The objective seems to be twofold: to provide State assistance at lower annual cost to the State and without the necessity for a large bonding issue and to assure continued good operation of the facilities. Such an approach is considered as acceptable as State financial assistance as long as the cost to the State is equivalent to 30 percent of the original project cost.

The committee wishes to point out here, since the question has been raised several times, that the metropolitan area bonus of 10 percent of the amount of the grant (not the project cost) is not applicable to grants made to projects qualifying as part of a basin plan under title II. This additional 10 percent under the provisions of section 8(f) of title I applies only to projects qualifying under that section. The maximum grant under the bill, therefore, is 50 percent, although the new maximum grant for projects not in a basin plan would increase from 33 to 44 percent.

The committee feels that this approach, which is a compromise among other suggested approaches, represents the most practical means of keeping grants for sewage treatment plants distributed most equitably between the old and the new programs. The approach adopted by the administration of giving a 50-percent grant if the project conformed to a basin plan would, in the opinion of the committee, result in making the reward so great for the new program that the old program upon which communities outside the basin plan must depend would be slowed down if not stopped altogether.

The inducement for a community and State to proceed as rapidly as possible in the development of approved basin plans must be sufficient to attract the States without making it so desirable as to reduce to a point of ineffectiveness the Federal incentive to assist those cities and towns which cannot hope for early approval of projects in accordance with a basin plan.

The incentive in the bill for the basin plan alone is, therefore, 10 percent, rather than the 20 percent in the administration bill. The grant for the State matching is also 10 percent, which has the advantage of being the same as the new additional grant under the existing

program. This would make the whole formula attractive both for projects not in the basin plan and for projects in the basin plan. By balancing the two programs, through the device of making the incentive for State matching 10 percent and the incentive for securing an approved basin plan 10 percent, the committee believes it has found an equitable solution.

This formula was arrived at after full and detailed discussions of the many possible variations. One variation would provide that the basin incentive grant increase by only 1 percent per year up to 10 years. This was intended to remove the temptation to wait for

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approval of the basin plan to secure an additional 10 percent all at once, which it is claimed would slow down the equally needed work to be accomplished in those areas which could not soon be expected to take advantage of the basin plan. Although this approach has considerable merit by removing the large temptation, the substitution of a series of small temptations might put a premium on maximum delay.

Another method discussed was the elimination of the basin incentive so as to make all projects equally competitive, and thus assure a more precise distribution of State funds in accordance with the need and ability to pay of the cities and communities. This, however, would make the development of a comprehensive pollution control and abatement plan, which is a vital portion of a long-range program, dependent entirely upon the effectiveness of the efforts of dedicated citizens or groups who would have nothing to offer in the way of reward other than the achievement of a desirable goal. The cost-sharing method, therefore, which was adopted by the committee appears to be best suited to a solution of the problem.

The bill provides certain limitations on the authority of the Secretary to make grants. These limitations include of course, the percentage limitations already discussed, and a prohibition against financing works already receiving Federal grants under other provisions of law, as well as prohibiting Federal grants under other provisions of law for works receiving grants under title II, except in the case of a supplementary grant under section 214 of the Appalachian Regional Development Act of 1965, or a supplementary grant under section 101 of The Public Works and Economic Development Act of 1965. In addition, no grant is to be made unless the works have been approved by the appropriate State water pollution control agency and agencies and have been certified by them as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs.

## PROCEDURES FOR OBTAINING APPROVAL OF BASIN PLANS

The bill provides that if a basin lies entirely within one State, that is, drains intrastate waters only, the Governor may develop a basin pollution control and abatement plan. If all or parts of more than one State lie within the basin, that is, if it is drained by interstate waters, the approval or concurrence by not less than 50 percent of the Governors of the States is required to develop a basin pollution control and abatement plan. Special provisions are made in the case of the Upper Colorado River Basin and the Columbia River Basin, which are similar to those in the Water Resources Planning Act of 1965. In the first case a majority of the Governors, that is, three of the four of the States of Colorado, New Mexico, Utah, and Wyoming, are required to develop a plan, and in the second case the Governors of at least three of the four States of Idaho, Montana, Oregon, and Washington, must develop or concur in the development of a basin pollution plan.

The use of the term "basin" does not mean to imply that the plan as developed should be only for the large river basins or coastal areas, such as the Missouri and Ohio Rivers, the gulf coast, or one or more of the Great Lakes. The basin for which plans may be developed may vary all the way from very small basins to large ones. They

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can be tributaries to a main stream, or they can be parts of a main stream together with its tributaries between two points. They could be small streams flowing into the ocean, the gulf, or the Great Lakes. They can also be combinations of these basins. In other words, the concept of "basin" is intended to imply a plan which has interdependent units, each of which must work in conjunction with the others. If an area under study is composed of several of the smaller basins, such as along the coast or in the Great Lakes, these may be grouped together in one overall basin if it helps in the definition of the problem and in the formulation of plans to produce the end result. In other words, the term "basin" is not intended to be primarily a geographic description, but rather a term for whatever physical outline, large or small, is best fitted to a study of the pollution control problem.

The fact that the "clean rivers" legislation on the basin plan approach includes not only the large but also the small rivers and that it also includes cities on lakes such as the Great Lakes and on the seacoast is clearly pointed out in the testimony of the Secretary of the Interior at the hearings.

Let me emphasize that when we refer to "clean rivers," we are not merely referring to a program. In fact, "clean rivers"



is not as descriptive a term as it might be to a program which is not limited, or which would not limit its aid or its organization merely to rivers, whether they are large rivers or small rivers, interstate or intrastate. We envision a program, and the legislation recommended is so intended, whereby cities on lakes which share the waters of the lakes, such as the Great Lakes cities, or even seacoast cities, which may have a large or have a small river, or what we would call a very limited river basin, could all participate. In other words, all the cities, all the municipalities of this country would and should qualify under this "clean rivers" concept.

The committee might add that it expects this procedure also to be applied to rivers flowing into international waters, such as the St. Lawrence.

A good example of a small basin, and also a good example of one of the unsuspected places into which the pollution problem has cropped up, is Lake Tahoe on the California-Nevada line. Those who have seen the lake will recall it as a beautiful blue gem set high in the Sierras. They would never dream that there is a pollution problem there. A special subcommittee of this committee was sent to investigate a pollution problem in late April and early May of this year. Following a meeting with Federal, State, and local representatives, hearings were held by the Federal water pollution control agency and a number of measures were proposed. These are in the nature of minimum requirements and were agreed to by the Governors of California and Nevada. They relate to the waters in the Upper Truckee River, Lake Tahoe and Truckee River tributaries as well as to other rivers running out of California and Nevada. The measures proposed at the hearings were preventive as well as corrective measures and included abolition of all cesspools and septic tanks in settled areas, collection of all sewage and export of the waste from the basin by pipeline to sparsely populated areas of California and Nevada.

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While the lake's crystal-clear waters now exceed drinking water standards, the threat of degradation is being posed by rising population, millions of visitors, and sewage seepage into the lake from the cesspools and septic tanks that still provide the principal mode of waste treatment.

As noted earlier, this bill is intended to supplement the 1965 Water Quality Act. Basin plans for pollution control are simply detailing the means of attaining the water quality contemplated by the standards adopted pursuant to the 1965 act. These standard (defined in the law as the criteria of quality and the plan of implementation and

enforcement) are expected to be limited to such characteristics as are essential to the definition of quality requisite for the protection of the defined uses.

After agreement by the Secretary and the States on the general approach to achieve such quality and the anticipated time schedule, attention must be directed to the development of specific proposals; and this the committee expects will be done by this bill. Rather than broadbush recommendations, the committee urges the appraisal of possibilities in attaining the objective at the optimum low-cost solution.

As noted under "Research Grants," the committee has reorganized the research and demonstration section to permit direct Federal financing in industrial as well as municipal waste control endeavors in order to excite new efforts and new techniques on shore and in the river. With imagination in planning, and funds to demonstrate feasibility, the basin plans need not be stereotyped.

Of fundamental importance in any basin planning—whether by a State agency on intrastate waters or by either an interstate agency or joint action of State agencies on interstate waters—is the prerequisite of agreement on water uses to be protected as well as such criteria as are necessary. The basin plan, and this will be subject to adjustment in coming years as the need dictates, will be predicated on adequacy for quality protection.

The bill does not require public hearings on intrastate waters as basis for developing a basin plan, but the committee would recommend that since basin plans for intrastate waters will ultimately be reviewed by Congress, such a public hearing would be most useful in acquainting the Congress with local opinion on the uses and criteria in the best public interest, as well as assuring the Congress that the plan included consideration of use and value of the waters for the various purposes, the practicability and physical and economic feasibility of securing abatement, and the public interest and equities involved. The committee expects that the report of the basin plan when submitted to Congress will include a summary of such hearings as were held to establish the basis for standards of quality in the basin plan.

Interstate agencies may develop basin plans for interstate waters to attain quality standards determined after public hearings by either the interstate agency or by the several States within the jurisdiction of the interstate agency.

The committee expects that the Secretary will continue in the role of reconciling differences when the States do not agree. Since the agreement among States on initiating a basin plan for interstate waters is obviously predicated on prior agreement on water quality standards, the secretary should actively participate in discussions

when States are in disagreement or set standards if the States cannot agree.

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The bill provides an exception to the requirement for approval by Governors where an interstate agency has been established. Such an agency may develop a basin pollution control and abatement plan for waters in its jurisdiction under whatever terms are in its basic agreement, and it need not necessarily be concurred in by the Governors as would otherwise be required under this bill. An exception is made in the case of the Upper Colorado River Basin and the Columbia River Basin where an interstate agency must have the concurrence of the Governors as described above before a plan is presented for approval.

A list of existing interstate agencies follows:

#### INTERSTATE AGENCIES

1. *New England Interstate Water Pollution Control Commission*.—New York, Connecticut, Rhode Island, Maine, New Hampshire, Massachusetts, Vermont (seven States).
2. *Ohio River Valley Water Sanitation Commission*.—Indiana, West Virginia, Ohio, New York, Illinois, Kentucky, Pennsylvania, Virginia (eight States).
3. *Delaware River Compact Commission*.—Delaware, New York, New Jersey, Pennsylvania, Federal Government (four States and Federal Government).
4. *Interstate Sanitation Commission*.—Connecticut, New Jersey, New York (three States).
5. *Klamath River Compact Commission*.—California, Oregon (two States).
6. *Interstate Commission on the Potomac River Basin*.—District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia (five States).
7. *Bi-State Development Agency*.—Missouri, Illinois (two States).
8. *Tennessee River Basin Water Pollution Control District*.—Kentucky, Mississippi, Tennessee (three States).

When the plan is submitted to the Secretary he must in turn refer it to the Secretary of Housing and Urban Development and to the Water Resources Council. In appropriate cases it is referred to the Secretary of State for review. Comments of these agencies must be made within 60 days, at which time the Secretary is authorized to give his final approval before transmitting the plan with the accompanying comments to the Congress.

In considering the plan, the Secretary must review it in the light

of the views, comments, and recommendations from the Secretary of Housing and Urban Development and from the Water Resources Council. If he determines that the plan will adequately and effectively maintain the waters covered by the plan at the level of quality established by the applicable water quality standards for those waters he shall approve the plan. The applicable water quality standards are those which have been established in accordance with the procedures in existing law in the case of interstate waters, or if no such standards have been established, then the standards are those which are reasonable in the light of precedents which have been established. For intrastate waters, the applicable water quality standards are those adopted by the State.

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After the Secretary approves a basin pollution control and abatement plan, he shall transmit it, together with all views, comments, and recommendations received from any department, agency, or instrumentality of the Federal Government, to the Congress for approval which must be by a specific statute. This procedure is similar to that followed by other departments in the water resources field, but somewhat less demanding since the other departments are generally required to secure approval by the Congress of their individual projects, which would not be suitable in the case of sewage treatment plants constructed by municipalities.

An exception is made in the case of the Tennessee and Delaware Rivers where the Tennessee Valley Authority and the Delaware River Commission may develop a plan and transmit it directly to Congress for approval.

The views of the committee on the foregoing procedure and its reasons for adopting it are discussed in the following paragraphs.

The objective is clear and simple. Its attainment was found to be a road beset by pitfalls. Simply stated, the committee was trying to find a means of providing for the development of a comprehensive plan for water pollution control and abatement along the same lines and within the same framework that has been developed over the years for similar objectives in the other fields of water resources. As pointed out earlier in this report, the development of plans in these other fields has been going on for many years.

Unfortunately, sewage treatment has not generally been considered in terms of basin planning. It was recognized, of course, that a sewage treatment plant located at an upstream city could have an effect on the waters below the sewage treatment plant of a downstream city, but here the factors peculiar to pollution abatement depart from those involved in other types of basin planning. Even in

this simple case the principle is not the same, for example, as the principle for the formulation of a plan for flood control, which might consist of a combination of upstream dams and downstream levees to protect towns and cities along a river. The more flood control provided by storage upstream, the less height would be required of the downstream levees; but the more sewage treatment included in the upstream city would not, by any means, guarantee a lesser degree of treatment required at the downstream city.

For this reason and because of the many other factors which complicate the problem, the development of a pollution control plan for an entire river basin has not generally been attempted in other than a few cases. As a result, and this has been pointed out by many critics, individual grants have been directed to scattered communities throughout the country, depending upon the urgency of their need and their financial capability. But because it is more difficult to prepare a comprehensive plan for pollution abatement, it does not mean that it is less desirable. In fact, in view of the present sorry state of our waters, the basin approach is not highly desirable, but essential.

The committee wishes to point out, however, that the basin approach should not be allowed to eliminate the possibility of supplementary treatment in the river at what might be called sore spots, that is, those places which may remain troublesome even after reasonably effective pollution control and abatement is established. In

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the absence of complete development of all the technology which is required for ultimate treatment, it is expected that those remedies which can be applied immediately will be utilized as practical solutions to immediate problems without waiting for the final refined technological plan for water pollution control and abatement which, like most plans in the water resource development field, may take a long time or may never be completely finalized.

Because of the great interdependence of a pollution control plan upon other aspects of river basin development, it becomes essential to assure that this goal is not achieved at the expense of the other functions which the Nation has taken so many years to provide. The development of a water pollution control plan along the lines indicated by the President in his statements on "clean rivers" must be brought about in such fashion that it will serve the ends being sought without encroaching upon those ends being sought or already achieved in other areas of development.

These areas of development must be recognized. Control of the basin pollution abatement program should not enable anyone to

assign a lesser priority to other programs, a power which the committee believes was embodied in the administration bills.

The language of the bill, therefore, has been carefully devised to give the Secretary of Interior the authority to provide for the most effective plan for water pollution control and abatement, while, at the same time, retaining the existing authorities of the Secretary of Agriculture to develop plans for small watersheds, of the Federal Power Commission to oversee the development of the hydroelectric power in keeping with the public welfare, of the Secretary of the Army to develop plans for navigation, flood control, and related purposes, and of the Secretary of Health, Education, and Welfare to carry out those responsibilities which remained after the transfer of the water pollution control program to the Department of the Interior.

It is this basic concept which the Congress envisioned in the creation of the Water Resources Council on which each of the five principal water resource agencies are represented at the highest possible level. It is in keeping with this division of responsibilities that the committee has been guided in its language in the clean rivers program in title II.

#### APPROVAL OF GRANTS FROM OTHER AGENCIES

After Congress approves a basin control and abatement plan, applications for assistance in financing construction shall not be approved by the head of any other Federal agency, or certain regional commissions unless, in the judgment of the Secretary, the works substantially conform to the basin plan.

#### ADMINISTRATIVE EXPENSES

The Secretary is authorized to make a grant not to exceed 50 percent of the administrative expenses of a designated planning agency in preparing a basin pollution control and abatement plan. These grants may be made only to the planning agencies designated as follows:

- (1) In the case of intrastate waters the Governor may designate an agency of State government as the planning agency.

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- (2) In the case of interstate waters, not less than 50 percent of the Governors of the States in which such waters are located may designate either agencies of the governments of such States or an interstate agency.

These grants are not mandatory since the Secretary is authorized but not required to pay these expenses. The agencies must be qualified to carry on the planning work, and the committee expects the

Secretary to work closely with the Governors in making this determination.

The committee discussed at some length the obstacles that might be present in the development of basin plans by a State or by several States combined. Some have going agencies in this field, but these are generally engaged in the problem of pollution abatement control in individual areas, although some have done considerable work in the overall basin planning field. The impact of the program proposed in this bill, however, and the incentives for the development of these plans will be so great that the committee agrees that assistance should be rendered by the Federal Government so that the program for construction which it is funding so substantially will not be crippled by lack of the engineering, economic, and administrative know-how to develop these plans.

This same problem was considered and debated in connection with the Water Resources Planning Act of 1965 and a similar problem was met by those responsible for its final passage by permitting the Secretary to pay up to 50 percent of the administrative expenses. Many States might have difficulty in proceeding at full speed if they lacked the funds to pay the full cost of adequate personnel or to expand their existing organizations sufficiently. On the other hand, if the Federal Government paid for the entire amount it would appear to be a disproportionate contribution to a goal of equal importance to both Federal and State interests. The committee, therefore, adopted a limitation of 50 percent as a middle ground. It will also avoid administrative conflicts which might otherwise occur if it differed from the allowance in the Water Resources Planning Act.

#### RESEARCH AND DEVELOPMENT

The growth of existing legislation on water pollution has resulted in something of a patchwork in the authorities for research and development. It is covered in almost minute detail in sections 5 and 6 of the existing law. It is broken down into various parts, and different amounts are authorized to be appropriated for individual items. In some cases, the amount to be appropriated has no ceiling which has the practical effect of removing the ceiling on almost all research.

Since research and development is a flexible undertaking, and since it requires a degree of freedom in the exercise of the activities devoted to its pursuit, the combining of the two authorities seems to be desirable. The result, the committee hopes, is a somewhat simpler directive to those responsible for carrying out these duties and permits a ceiling to be placed on the entire program.

In the bill the research items now authorized under sections 5 and 6 of the existing law, with two additional items, are grouped together

under section 5. To accomplish this, the research originally authorized in section 6 on combined sewers, that is, sewers which carry both

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storm water and sewage or other waste, has been transferred to section 5. A new subsection has been added covering grants to industries for research and demonstration projects for the treatment of industrial and other waste which shall have industrywide application. A new study on estuaries has been authorized.

Research should include the development of techniques for area treatment of wastes, either as combinations of municipal and industrial wastes or as combinations of industrial wastes.

The solids resulting from treatment of wastes pose problems, particularly in metropolitan areas where land is not available for solid waste disposal. The practice of haulage of solids for disposal into lakes or ocean can merely change the location of water quality impairment. Research is urged into means of reducing the amount of solids and into methods of disposal which improve the overall situation.

The committee also understands that comprehensive studies have demonstrated the desirability of having more effective techniques to appraise the assimilative capacity of streams in order to better assess effects of increasing populations and industrial and agricultural usage. The committee feels that since the proper usage of such capacity is both an economic resource and an integral component in assessing water quality standards, demonstration projects to determine practical measuring and control techniques would be most desirable.

Also, since the objective of the pollution control program is to provide water of acceptable quality, research is needed to explore possible supplemental treatment techniques, and methods for treating the residual water quality problems which remain in areas where treatment facilities have been constructed. This would include methods which would permit harvesting algae and recovering silt from land erosion. Research is also needed to better define the water quality levels which do adversely affect those using the water.

It is emphasized by the committee that every new avenue should be explored in the quest for solution of the many pollution problems which this Nation faces. In this connection, the committee was impressed with the new approach pioneered by Gov. Edmund G. Brown, of California, in which systems engineers attack everyday problems of government, particularly in the field of pollution control.

#### INDUSTRIAL RESEARCH

The reason for the addition of industrial grants is recognition of



the fact that industry, which was at one time less of a polluter than municipalities and communities, has now become a major polluter. The complexity of some industrial waste problems requires the active involvement of industry itself which has intimate knowledge of manufacturing and other industrial processing operations. The stipulation that 70 percent of the cost of such investigations be borne by the Federal government should be an inducement to have industrial support and participation in the studies.

The committee is not inclined to belabor industry for its growing contribution to this problem. Nothing will be gained by attempting to fix blame. The problem is here and it must be solved or some future generation will be worrying about clean oceans. The committee does feel, however, that more should be done by industry, and

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it is very pleased to note that during the hearings evidence was presented to show that industry is attempting to do its part.

The Federal Government should do its part, too, in helping in the solution of this problem, certainly, in developing means for controlling it. The inclusion of specific grants to industry for research is based upon the same concept as in existing law for grants to public and private agencies and institutions for research in this field. It would be of little value if we solved the technical means of preventing or alleviating the sewage from municipalities and failed to lend necessary assistance to research for the disposal of waste emanating from the various types of industrial and manufacturing processes.

Industrial research should not be limited to the technology of waste treatment. It should also include an investigation of possible financial methods of providing for this treatment, including methods of providing treatment works to the smaller industries on an installment basis. If a small company is faced with the necessity of putting in extensive treatment works as a result of Federal and State laws or public pressure, such financing could be helpful.

#### ESTUARY RESEARCH

The second addition to the research and development field is authorization for a study of estuaries. In the bill, estuaries are defined, the contents of the report expected to be produced are specified, and 3 years are allowed for its completion. The committee was impressed by the evidence presented to it, both during the hearings and later, indicating the need for such a study. Again, the committee has no desire to duplicate the work already being accomplished by agencies, but insofar as pollution is concerned, it appears that a comprehensive study as proposed in the bill, with the assistance of other

departments and agencies and the Federal Government, would be most timely.

Other legislation is pending in the Congress to establish a study of estuaries. The committee believes that the study proposed in the bill is generally broader and is more suitable in its wording in the framework of the Federal Water Pollution Control Act. The Department of Interior has stated in hearings before another committee that a thorough nationwide study should be conducted to identify the estuary areas of the country that should be preserved before an estuarine land and water acquisition program as contemplated by other legislation is undertaken. The committee feels that the provision of the bill will better fulfill the need for this nationwide study. The bill also provides that consideration be given in the study to the development of estuaries so that a proper balance can be maintained between preservation and development.

The report will include recommendations for a comprehensive national program for the preservation, study, use, and development of estuaries. The committee feels that it should include suggestions for a national estuarine system along the lines proposed in other pending legislation.

#### RESEARCH APPROPRIATIONS

The appropriation authorized for the entire program for research and development is \$75 million per year for the fiscal years 1967, 1968 and 1969, plus \$1 million per year for the same years for the

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estuary study. Of the \$75 million authorization the bill specifies that not less than 25 percent per year shall be used for industrial research.

#### USE OF FEDERAL EMPLOYEES

If a State or interstate agency requests assistance in the preparation of a basin pollution control and abatement plan being prepared for submission and approval to the Secretary and to the Congress, the head of each department, agency, and instrumentality of the Federal Government is authorized to detail employees of such department, agency, or instrumentality to the State or agency to assist in this effort. Since the Federal Government may pay 50 percent of the administrative expenses for the preparation of this plan, these employees would, in effect, be paid one-half by the Federal Government and one-half by the States.

#### SPECIFIC DESIGNATION AND PROPOSALS

The bill recognizes that there are agencies already established by

law to carry out the entire program of water resource development in a basin. The two areas in which this condition exists are the Tennessee River and the Delaware River. In the case of the Tennessee River, the Tennessee Valley Authority is a Government corporation. In the case of the Delaware River, the Delaware River Basin Commission has been created by the Delaware River Basin Compact approved by Congress and the Secretary of Interior is a member of the Commission. In recognition of this situation, the bill provides that basin pollution control and abatement plans prepared by the Tennessee Valley Authority and approved by its Board of Directors, or prepared and approved by the Delaware River Basin Commission, should need no further review in the executive branch of the Government, and may, therefore, be transmitted direct to Congress for statutory approval. The method of approval is specified to be by act of Congress.

#### LABOR STANDARDS

The bill contains the usual language to insure that wage rates shall be not less than those prevailing for the same type or work on similar construction in the immediate locality, as determined by the Secretary of Labor, for projects financed by grants under the water pollution control program. This is in accordance with the act of March 3, 1931, as amended, commonly known as the Davis-Bacon Act.

#### DEFINITIONS

The bill provides for a definition of the term "basin" as used in the clean rivers restoration title, which is somewhat different from the river-basin concept as it is normally known. The reason for the broader definition is to include coastal waters, estuaries, bays, lakes, and portions of these bodies of waters.

Ordinarily, the problems in the development of water resources are in a river basin which ends at the point where the river discharges into the sea, or into a bay or lake. In the water pollution program, however, there are many instances of pollution discharges directly into these bodies of water, as well as into rivers and their

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tributaries. It is the intention of the bill to cover these cases and such waters have therefore been included in the definition of "basin."

#### COST ESTIMATE AND STUDY

The bill provides, in a new section 6 of the existing Federal Water Pollution Control Act, authority for the Secretary to make (1) a detailed estimate of the cost of carrying out the provisions of this act:

(2) a comprehensive study of the economic impact on affected units of Government of the cost of installation of treatment facilities; and (3) a comprehensive analysis of the national requirements for and cost of treating municipal, industrial, and other effluent to attain such water quality standards as are established pursuant to the Federal Water Pollution Control Act or applicable State law. He shall cooperate with State water pollution control agencies and with other water pollution control planning agencies. The purpose is to develop new programs and to furnish the Congress with the information necessary for authorization of appropriations for the fiscal years beginning with the fiscal year ending June 30, 1968. This is one of the reasons why the committee feels that the amounts it has provided for construction grants are ample for the time being.

He shall submit the detailed estimate and comprehensive study of cost for the 3-year period beginning July 1, 1968, to the Congress no later than January 10, 1968. The 3-year period would, therefore, cover the fiscal years 1969, 1970, and 1971. This study shall be updated each year so that the study submitted no later than January 10, 1969, would cover the fiscal years 1970, 1971, and 1972, and so on. This updating would consist each time of revisions as necessary in the figures and conclusions for the 2 fiscal years following the date of submission and for a third fiscal year to be added.

#### STUDY OF TRAINING OF STATE AND LOCAL PERSONNEL

The bill authorizes the Secretary to make a complete investigation and study to determine the need for additional trained State and local personnel to carry out the water pollution control and abatement program, both for those for which grants are made under the program as amended by this act, and other programs for the same purpose. He is also to study the use of existing Federal training programs to train such personnel. The study shall be submitted to the President and to the Congress not later than July 1, 1967.

#### PROGRAM GRANTS

The bill increases the authorization for grants to States and interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution. These are essentially planning grants. Existing law authorizes grants for this purpose, concluding with \$5 million for the fiscal year ending June 30, 1968. The bill would increase the grants for the fiscal years 1968 and 1969 to \$10 million each.

This is the source of funds for the payments of 50 percent of the administrative expenses in the development of comprehensive plans for water pollution control and abatement under title II. It is also

the source of funds for expenses of the States and interstate agencies  
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in carrying out their responsibilities for construction grants, water quality standards, and enforcement.

#### REIMBURSEMENT

The bill provides for reimbursement for the construction of any treatment works initiated after June 30, 1966, in advance of the availability of funds for a grant, subject to the following qualifications:

(1) The Secretary must approve the project prior to commencement of construction, except for projects initiated after June 30, 1966, and before the date of enactment of this act which he may approve subsequent to commencement of construction.

(2) The State or appropriate agency which constructs the project must submit an application to the Secretary, approved by the appropriate State water pollution control agency, for a grant for the project.

(3) Upon his approval of the application, the Secretary is authorized to make a grant for such project to be paid from future appropriations.

(4) All provisions of the act must have been complied with to the same extent and with the same effect as though the grant were to be made for future construction of the project.

(5) The approval of the project by the Secretary, or the making of a grant, shall not be construed to constitute a commitment or obligation of the United States to provide funds.

This reimbursement provision applies to grants made under the authority of section 8, as amended, and does not apply to grants made under title II of the clean rivers restoration program.

#### HEARING BOARD AND REPORTS

The bill adds two provisions relating to the hearing board procedures in section 10 of the Federal Water Pollution Control Act, which deals with enforcement measures against the pollution of interstate or navigable waters. The bill declares that it shall be the responsibility of the hearing board to give each person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the hearing board. The bill also requires that in connection with any hearing the Secretary is authorized to require any person alleged to be contributing to water pollution to file a report concerning the character, kind, and quantity of such discharges, and the measures taken by the alleged polluter to abate the pollution. Penalty for failing to comply is set at \$100 per day.

TRANSFER OF ADMINISTRATION OF 1924 OIL POLLUTION ACT FROM  
SECRETARY OF ARMY TO SECRETARY OF INTERIOR

The Oil Pollution Act of 1924 prohibits the discharge of oil in any manner into or upon the coastal navigable waters of the United States from any vessel. Failure to comply is a misdemeanor and punishable by a fine not exceeding \$2,500 nor less than \$500, or by imprisonment not exceeding 1 year nor less than 30 days, or both by such fine and imprisonment for each offense.

The bill provides for the transfer of the administration of the Oil Pollution Act from the Secretary of the Army to the Secretary of the

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Interior. The latter may make use of the organization, equipment, and other facilities of the Secretary of the Army for the preservation and protection of navigable waters.

Personnel of the customs and Coast Guard shall continue to have the authority to enforce the Oil Pollution Act. It is not intended that the duties or functions of the U.S. customs or the Coast Guard in connection with navigable waters, except with respect to the administration of the Oil Pollution Act, shall be affected by this provision.

INCLUSION OF INDIAN TRIBES AS "MUNICIPALITIES"

In order to make certain that Indian tribes or tribal organizations are considered as communities, eligible for assistance under this Act, the bill provides that they shall be included in the definition of the term "municipalities."

STUDY OF FINANCIAL ASSISTANCE TO INDUSTRY

The bill authorizes the Secretary to conduct a full investigation and study of methods for providing financial incentives to assist in the construction of facilities and works by industry to reduce or abate water pollution. This study shall include, but not be limited to, the possible use of tax incentives, as well as other methods of financial assistance. In carrying out this study the Secretary shall consult with the Secretary of the Treasury, as well as with the head of any other appropriate department or agency of the Federal Government.

The committee takes the position that a study is required, and it also feels that this must be considered as only a part of the whole picture of incentives.

FEDERAL COST

The Federal cost or total new authorizations in the bill amount to \$2,315 million and cover the fiscal years 1968 through 1971. The breakdown of this figure is given in the table at the end of the summary at the front of this report.

## HEARINGS

Hearings were held by the committee for 3 days, July 12, 13, and 14, 1966, on H.R. 13104 (the Fallon bill), H.R. 16076 (the Blatnik bill), and related bills.

Testimony was received from Members of Congress; Federal, State, and city officials; representatives of conservation and other national associations; representatives of industry; and individuals.

For convenient reference, the complete bills, H.R. 13104 and H.R. 16076 as introduced, are printed at the beginning of the hearings.

## AGENCY VIEWS

Letters from the Federal agencies expressing views on H.R. 16076 follow in alphabetical order. The comments are on the bill as introduced and not as reported.

The committee has given the views careful consideration and has incorporated a number of the suggestions in the bill.

The letter from the Department of the Interior is of particular significance, not only because of its substance, but also because it includes a draft of the latest bill proposed by the administration.

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A letter from the Appalachian Regional Commission is also included since, although it was based on H.R. 13104, it contains pertinent comments with respect to major matters which the committee considered with respect to H.R. 16076.

The following agencies have responded:

The Appalachian Regional Commission.  
Department of the Army.  
Bureau of the Budget.  
Department of Commerce.  
Comptroller General of the United States.  
Department of Housing and Urban Development.  
International Joint Commission.  
Department of the Interior.  
Department of Justice.  
Department of Labor.  
Department of the Treasury.

THE APPALACHIAN REGIONAL COMMISSION,  
*Washington, D.C. July 22, 1966.*

HON. GEORGE H. FALLON,  
*House of Representatives,*  
*Washington, D.C.*

DEAR CONGRESSMAN FALLON: You requested my comments for the Committee on Public Works on the proposed Clean Rivers Restora-

tion Act of 1966, H.R. 13104 and H.R. 13105. I feel that the proposed legislation would be useful. It would demonstrate that a concerted and coordinated effort on affected communities and States will make more valuable the rivers of several basins of the United States. I would like to note, however, some reservations concerning the proposed legislation.

1. The bill does not mention the serious pollution caused by acid mine drainage in a number of Appalachian States. This and other pollution problems cannot be controlled by the construction of waste treatment works. Affected basing planning groups should study the problem and propose in the plans the means to control the damage.

2. An additional subsection should be added to section 106 before (f) at page 10 which brings into the review process existing and proposed regional commissions authorized by Congress. Those commissions would evaluate the impact of the proposed river basin plans on regional economic development.

(3) We understand that the intent of the second sentence of section 107(a) (1) is to make possible the augmentation of the Secretary's grants by supplemental grants authorized in other legislation. To accomplish this purpose that sentence should be changed to: "The Federal contribution may be increased above this percentage by supplemental grants made pursuant to section 214 of the Appalachian Regional Development Act of 1965 (79 Stat. 5), or title I of the Public Works and Economic Development Act of 1965, or title I of the Housing and Urban Development Act of 1966."

To accomplish this purpose it will also be necessary to modify section 107(a) (2), which would prevent such supplementation and would also prevent the joint use of the clean rivers program

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and other programs in making the regular 30-percent grant. For example, sewage treatment plant construction funds made available under section 212 of the Appalachian Act are combined with Public Law 566 funds to supply the normal 30-percent grant for waste treatment plant construction. Section 212 funds could be combined similarly with funds provided by the Clean Rivers Restoration Act. Since the Water Pollution Control Act and the Farmer's Home Act are the acts intended to be excluded, the exclusionary clause might accomplish that simply by specifying the acts.

4. Section 108 seems to be a reasonable attempt to coordinate



the various project grant programs for water pollution control. I think that centralized control of this sort should be attempted on this limited basis to see if the various waste treatment grant programs can better be coordinated.

The application should be approved after a reasonable time period, unless the Secretary raises objections, because once the projects have reached the Washington level they have been in the process of development for some time. Because of the local need for quick action, we would recommend that an expeditious review process be instituted by the Secretary of Interior.

The Bureau of the Budget has advised that there is no objection to the submission of this report, from the standpoint of the administration's program.

Sincerely yours,

JOHN L. SWEENEY.

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DEPARTMENT OF THE ARMY,  
Washington, D.C., July 14, 1966.

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,*  
*House of Representatives.*

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to H.R. 16076, 89th Congress, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

H.R. 16076 is designed to accomplish the following: Increase authorized amounts for water pollution research in general and, additionally, authorize the Secretary of the Interior to study vessel pollution on the Great Lakes and other navigable waters, with a report and recommendations to be submitted to Congress by July 1, 1967; increase authorized amounts for research and development and construction grants; establish a loan authority to assist non-Federal entities in meeting construction obligations; provide regulatory means for dealing with pollution problems of international impact, reiterate congressional support for regionally oriented pollution control and abatement action through a "clean rivers restoration program;" authorize the Secretary of Interior to conduct continuing studies of the economic and related effects of the Federal water pollution control program; and amend the Refuse Act of 1899 and the Oil Pollution Act of 1924.

The principal objective of this bill, which the Department of the

Army strongly supports, is to strengthen and make more effective the

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Federal pollution control program. We favor increased Federal assistance for research, construction of treatment works and sewer systems, and further studies of both the Nation's pollution problems and the effectiveness of existing programs in dealing with them. We also favor a regional or river basin approach to pollution control planning as contemplated by section 12 of the proposed legislation. We feel compelled, however, to recommend a few modifications of the bill to assure implementation within the framework of the Water Resources Planning Act of 1965 (42 U.S.C. 1962-62d-5).

The President's recent message on "Preserving Our National Heritage," which strongly endorsed a regional approach to pollution problems, also emphasized the importance of balanced water resources planning and recognized the role of the Water Resources Council in that regard. The President referred to the Water Resources Planning Act, which " \* \* \* created the Water Resources Council to coordinate all aspects of river basin planning. This unified effort (river basin planning under Council auspices) promises to make the work of pollution control more effective."

The proposed "clean rivers restoration program" would authorize the Secretary of the Interior, at the request of one or more State Governors, to designate planning agencies charged with development of comprehensive pollution control and abatement plans for river basins or portions thereof. The plans would have to be consistent with the standards established under the Water Quality Act of 1965 (Public Law 89-234), include provision for treatment works and sewer systems, provide for maintenance and improvement of water quality standards, and include proposed methods for adequate financing of the plan. Following review by interested State and Federal agencies, the plan, if it meets the above criteria, would be approved by the Secretary of the Interior.

We believe that if the proposed regional or river basin pollution control planning agencies were independent of Water Resources Council authorities, it would risk conflict or competition with Council-directed comprehensive river basin planning for all water resource purposes conducted by the river basin commissions. The views and plans of entities with pollution abatement responsibilities are reflected in current comprehensive river basin planning activities through the Federal Water Pollution Control Administration, which is a full partner in Council-monitored planning efforts. In this fashion broad-scale pollution control and abatement planning occurs in the unified context endorsed by the President and supported by sound

resources development theory. To assure fitting the efforts of the planning agencies envisioned by H.R. 16076 into the broader water resources planning activities, we believe that the proposed legislation should require that the river basin commissions, wherever they exist, should participate in the naming of planning agencies and provide general supervision for any basinwide pollution control and abatement efforts.

This Department considers that the basic difficulties with respect to pollution abatement and control relate to non-Federal organizational and enforcement initiative, or lack thereof; not an absence of planning authorities. The combination of expanded financial assistance, as proposed under H.R. 16076, and the requirements of the Water Quality Act of 1965 regarding State water quality standards should serve as the necessary incentive to effective non-Federal action.

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The "clean rivers restoration program" is intended to, in part, "\* \* \* encourage waste treatment consistent with water quality standards (to be developed pursuant to Public Law 89-234)." Physical waste treatment is, of course, indispensable. However, complementary works, such as reservoirs including water quality storage, will often prove necessary. We interpret section 12(d)(3), which provides for approval by the Secretary of the Interior of comprehensive pollution control and abatement plans, as not conveying any authority for authorizing complementary reservoir facilities.

In keeping with these comments we recommend substituting for section 12(a) (p. 14, lines 6 through 20), the following:

"SEC. 12. (a) In order to reclaim, restore, and maintain the natural waters of the Nation through the preparation and development of comprehensive river basin pollution control and abatement plans and through the establishment of economic incentives to encourage waste treatment consistent with water quality standards effected pursuant to section 10(c) of this Act, the Secretary may, at the request of the Governor or Governors of one or more States, designate planning agencies. Each such planning agency shall be a River Basin Commission established under the Water Resources Planning Act (79 Stat. 244) or an agency designated by such commission, or, if the Secretary, after consultation with Federal agencies, States, and local bodies, believes there are compelling reasons not to designate such a Commission, or agency designated by such Commission, he may designate some other organization which provides for adequate representation of appropriate Federal, State, interstate, local, or when appropriate, international interests in the river basin or portion

thereof involved and which is capable of developing an effective, comprehensive water quality control and abatement plan that is part of or consistent with a comprehensive river basin water resources plan.”

Also, we recommend substituting for section 12(d) (3) (p. 16, lines 15 through 19), a new section to read:

“(3) The Secretary of the Interior shall review the plan or portion thereof and the agency comments, and, if he determines, pursuant to regulations prescribed by the President, that the plan or portion thereof adequately and effectively complies with subsection (b), he shall approve the plan or portion thereof.”

We anticipate that the President would designate the Water Resources Council to determine the consistency of the comprehensive pollution control and abatement plan or portion thereof with the broader plans for the development of the comprehensive water and related land resources of the river basin.

On page 22 we recommend deleting lines 1 through 4 (sec. 13) and substituting the word “Army” in the second proviso the following: “after consulting with the Secretary of the Interior, and,”.

The effect of this modification is to keep responsibility for administering this aspect of the navigation laws with the Secretary of the Army, but require him to consult with the Secretary of the Interior with respect to water pollution.

With these modifications, the Department of the Army would interpose no objection to enactment of H.R. 16076.

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In view of your request for expediting this report, time did not permit obtaining the advice of the Bureau of the Budget.

Sincerely,

ALFRED B. FITT,  
*Special Assistant (Civil Functions).*

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EXECUTIVE OFFICE OF THE PRESIDENT,  
BUREAU OF THE BUDGET,  
Washington, D.C., August 15, 1966.

HON. GEORGE H. FALLON,  
*Chairman, Committee on Public Works, House of Representatives,*  
*Rayburn House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in reply to the request of your committee on H.R. 15106, H.R. 15134, and H.R. 15172, identical bills to amend the Federal Water Pollution Control Act in order to improve the programs under such act.

On July 20, 1966, Secretary Udall transmitted a draft bill to your committee which would carry out the administration's objectives. That draft bill includes elements of H.R. 16076, the administration's "Clean Rivers Restoration Act of 1966," H.R. 13104, and the Senate-passed bill, S. 2947.

As noted in Secretary Udall's letter of July 20, 1966, the draft bill enclosed with that letter is in accord with the program of the President. Accordingly, the Bureau of the Budget favors its enactment rather than H.R. 15106, H.R. 15134, or H.R. 15172.

Sincerely yours,

WILFRED H. ROMMEL,  
*Assistant Director for Legislative Reference.*

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GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,  
*Washington, D.C., August 17, 1966.*

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works, House of Representatives,*  
*Washington, D.C.*

DEAR MR. CHAIRMAN: This is in further reply to your request for the views of this Department concerning H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

The purpose of H.R. 16076, cited as the "Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966," is to accelerate, improve, and make more effective the present Federal program for water pollution control.

In general, the proposed amendments to the Federal Water Pollution Control Act provide for substantial increases in the sums authorized to be appropriated for grants to be employed by communities in water pollution abatement construction. Also, new authority is provided for making loans in addition to grants to communities needing additional financial help for financing construction. The procedures and limitations of the loan program are carefully defined. The following new sections are to be added to the act:

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1. Section 12, the "Clean rivers restoration program." This section defines procedures and economic incentives for the development and implementation of plans for comprehensive river basin pollution control and abatement coordinated with river basin water resources plans.

2. Section 13, the "Cost and economic impact study." This section provides a basis for evaluating programs authorized

under the act, and for developing new programs, thereby providing Congress with guidelines for authorization of future appropriations.

The bill in section 2 (b) directs the Secretary of the Interior to conduct, in consultation with the heads of certain other directly affected Federal agencies, including the Secretary of Commerce, a study of the extent of pollution from boats and vessels. The Secretary is also directed to appoint a technical committee composed of representatives of the affected agencies and others to advise him in formulating recommendations. A report with recommendations for an effective control program is to be submitted to the Congress no later than July 1, 1967.

The bill would also amend the Oil Pollution Act, 1924, so as to extend its application to navigable and interstate waters, as well as coastal waters, and to the adjoining shorelines of the United States, and to extend application of the prohibition on oil discharge from vessels to boats, shore installations, and terminal facilities.

This Department is in accord with the objectives of H.R. 16076. However, two related bills are also pending before your committee. One, H.R. 13104, cited as the "Clean Rivers Restoration Act of 1966," was introduced at the request of the Department of the Interior and implements recommendations of the President contained in his message of February 23, 1966, to Congress on "Preserving Our Natural Heritage" for a "clean rivers" program and an extension and improvement of the present water pollution program. The second, S. 2947, similar in some respects to H.R. 16076, passed the Senate on July 13, 1966, and was referred to your committee.

We understand that the Department of the Interior has considered all these bills in making recommendations for a proposal acceptable to the executive branch and the Congress. This proposal was submitted to your committee by the Department of the Interior on July 20, 1966.

Accordingly, while this Department favors the objectives of H.R. 16076, we would defer to the Department of the Interior as to the specific legislative proposal deemed necessary to provide for the most effective Federal program for water pollution control.

The Bureau of the Budget has advised that there would be no objection to the submission of this report and that the draft bill submitted by the Department of the Interior on July 20, 1966, is in accord with the program of the President.

Sincerely,

ROBERT E. GILES,  
*General Counsel.*

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COMPTROLLER GENERAL OF THE UNITED STATES,  
*Washington, D.C., July 19, 1966.*

B-135945.

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,  
House of Representatives.*

DEAR MR. CHAIRMAN: This is in reference to your letter dated July 7, 1966, requesting our comments on H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

We have no comments to offer concerning the action to be taken on the bill.

Sincerely yours,

FRANK H. WEITZEL,  
*Assistant Comptroller General of the United States.*

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THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT,  
*Washington, D.C., July 15, 1966.*

Subject: H.R. 16076, 89th Congress (Representative Blatnik).

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,  
House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your July 7 request for a report from this Department on H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

This bill contains a number of amendments which would liberalize in many respects the existing Federal Water Pollution Control Act. It would also establish a clean rivers restoration program in the Department of the Interior.

The proposed clean rivers restoration program contained in H.R. 16076 would, upon the request of any Governor, require the Secretary of the Interior to designate planning agencies to develop comprehensive water quality and control abatement plans which would be part of, or consistent with, comprehensive river basin water resources plans. Comprehensive plans would be required to be consistent with water quality standards established for interstate waters within the river basin pursuant to section 10 (c) of the Federal Water Pollution Control Act.

Planning agencies would be charged with the responsibility of making recommendations with respect to effective and economical sewage treatment works and sewer systems, and providing for the maintenance and improvement of water quality standards within the

basin, including proposed methods of financing facilities necessary to implement the plan. Plans would be transmitted by the agency to the appropriate Governor, interstate agency, commission or local agency involved for their recommendations, and following this, to the Secretary of the Interior. The Secretary would be required to transmit such plans for review to the Secretaries of Health, Education, and Welfare and Housing and Urban Development, and to the Water Resources Council (and, when appropriate, to the Secretary of State).

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Under the bill, grants of up to 50 percent of construction costs would be authorized for financing the construction of treatment works from funds appropriated pursuant to section 8(d) of the Federal Water Pollution Control Act. In the event that any project is proposed to be located, in whole or in part, in an urbanized area, it would be required to meet the planning and programming requirements of this Department with respect to water and sewer projects for which grants are provided under title VII of the Housing and Urban Development Act of 1965.

This Department is in complete accord with the views which Secretary Udall presented to your committee with respect to H.R. 16076 on July 12. Accordingly, we would defer to the Department of the Interior with respect to any specific modifications in the bill which may be required to carry out fully the administration's recommendations for the clean rivers program and for continuing and improving the existing pollution control program.

Time has not permitted us to secure the advice of the Bureau of the Budget as to the relationship of this report to the administration's program.

Sincerely yours,

ROBERT C. WEAVER.

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DEPARTMENT OF THE INTERIOR,  
OFFICE OF THE SECRETARY,  
Washington, D.C., July 20, 1966.

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,*  
*House of Representatives, Washington, D.C.*

DEAR MR. FALLON: Your committee has requested this Department's views on H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act. H.R. 16076 is similar to the Senate-passed bill S. 2947.



We strongly support legislation which carries out the administration's two principal objectives. These are: first, the authorization of a meaningful and effective clean rivers program, as recommended by the President; and, second, an extension and improvement of the present pollution control program. The administration bill, H.R. 13104, and H.R. 16076 and the Senate-passed bill would, with some modifications, carry out these objectives. The enclosed draft bill blends the most important elements with the needed modifications of these bills. It is these elements that the administration regard as the essential elements of this legislation. We recommend the early enactment of legislation in the form of the enclosed draft bill.

The first part of the enclosed draft bill relates to the establishment of a new clean rivers program as a logical extension of last year's Water Quality Act of 1965. This program is designed to attack the water pollution problem on an entire river basin basis.

The bill defines the term "river basin" broadly to include a river and its tributaries, coastal waters, estuaries, bays, lakes, and other public waterways or portions thereof. It has three objectives. They are: (1) the establishment of adequate water quality standards by the States for the basin waters, (2) the adoption of adequate pollution control plans for each river basin to implement the standards, and

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(3) the construction of adequate waste treatment systems in accordance with the plans.

We envision the clean rivers program as the broad approach to water pollution control. Yet, it is not intended that this program supplant other pollution control programs. Rather, we believe it supplements and complements existing pollution programs. While planning is going on, these other programs must continue. Once a plan is developed, however, for a river basin, they will then conform to that plan. This program will not be permitted to delay or impede the efforts now going on to speed up pollution control.

Under this program planning agencies will be designated by the Secretary after close consultation and coordination with the Governors of the States involved. Wherever feasible the planning agencies would be river basin commissions established under the Water Resources Planning Act or existing commissions or agencies, such as the Delaware River Basin Commission. The planning agencies would prepare detailed plans for the control and abatement of pollution in the river basin involved. The primary purpose of the plan is to develop adequate means and measures for implementing water quality standards for the basin involved. The Secretary, with the President's approval, must establish guidelines for the planning agen-

cies to follow in developing their plans. Such guidelines will be reviewed in advance of the President's approval by interested Federal agencies. The guidelines will establish the requirements for the designation of a planning agency and for approval of a plan. The guidelines for approval of the plan would cover such items as the means and measures for implementing water quality standards; the development of a basin organization, where none exists; and the establishment of adequate financing, including economic incentive.

After a planning agency is designated and after water quality standards for the basin are established, the Secretary may make up to 50-percent grants to finance waste treatment works if, based on preliminary reports, he believes such works will substantially conform to the plan in progress. If a plan is not developed and approved within 3 years after a planning agency is designated, the 50-percent grant authority for that basin will cease. The purpose of this provision is to provide a stimulus to the planning agency and to prevent delays in getting the program underway.

The proposed plan of each planning agency is subject to review by State, local, and Federal interests prior to acceptance. In addition, if waste treatment projects in the basin are to continue to receive 50-percent grants, the plan must meet the approval of the Secretary.

Once a plan is approved, the Secretary can continue to make 50-percent waste treatment construction grants to the local communities in the basin involved. The approval of the plan will result only in authorizing increased grants, nothing more.

It should be noted that both H.R. 16076 and the Senate-passed bill condition the receipt of increased construction grants by requiring the States within a river basin to make a commitment to pay 30 percent of the costs of the treatment works. We agree with the principle that the States must assume more responsibility, including increased financial responsibility, in pollution control. Two States have already taken the initiative; namely, Maine and New York. We hope that more will. We believe, however, that such a requirement, at this

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time, *will unduly delay* the clean rivers program. Furthermore, we are unaware of any reason for limiting this requirement to the clean rivers program. If the principle of State participation is sound, it should also apply to the existing waste treatment construction program if the dollar limitations in that program are removed as both these bills provide. We therefore are strongly opposed to this 30-percent requirement in the clean rivers program *unless* it is made to apply to *both* programs.

Our draft bill authorizes \$3.45 billion over 6 years for both the clean rivers program and the existing construction grant program. Each year the first \$100 million will be allocated to the States in accordance with the 50-percent population and 50-percent per capita income formula in section 8(c) of the Federal Water Pollution Control Act. Up to 60 percent of the money in excess of the first \$100 million each year will be available to the Secretary for the clean rivers program alone.

We firmly believe that the clean rivers portion of our draft bill will be extremely beneficial in carrying out the objectives of the Water Quality Act of 1965.

In addition to clean rivers, the enclosed draft bill also makes a number of important changes and improvements in the present provisions of the Federal Water Pollution Control Act, as amended. Most of these are now contained in H.R. 16076 and the Senate-passed bill. They are:

1. An increase of support grants for State water pollution control agencies from \$5 million a year to \$10 million and an extension of this grant authority to 1972.

2. A repeal of the present \$5 million ceiling on pollution research to enable the Federal Government to spend, as the President has recommended—over \$20 million next year on such research.

3. An extension of the existing construction grant program to June 30, 1972. As we have already indicated, a total of \$3.45 billion could be authorized to carry out both that program and the clean rivers program.

4. A doubling of the present dollar ceilings on construction grants from \$1.2 to \$2.4 million for single projects and from \$4.8 to \$9.6 million for joint projects. These increases will be helpful to many communities. It should be noted, however, that during the 2-year period from May 1964 to May 1966 over 1,300 construction grants were not affected by the project ceilings. Only 13 applicants were affected by those ceilings which were increased by the Water Quality Act of 1965 from \$600,000 and \$2.4 million to the present \$1.2 and \$4.8 million.

5. Authority to continue to waive the dollar limitations in the existing construction grant program if the State agrees to pay 30 percent of the total project cost.

6. An increase in the demonstration grant percentage from 50 to 75 percent for resolving the problems of storm sewers and sanitary sewers, and authority for 75-percent grants and contracts for research, development, and demonstration of new or improved methods of advanced waste treatment.

7. Authority to initiate enforcement proceedings when pollution

originating in a State endangers the health or welfare of persons in a foreign country.

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8. A direction for the chairman of an enforcement conference to give persons contributing to, or affected by, the alleged pollution an opportunity to present his views.

9. Authority for the Secretary to require, in connection with a conference, relevant information on pollution discharges. Protection is afforded to trade secrets and secret processes.

10. An extension of the water quality standards provisions of section 10(c) to navigable waters as well as interstate waters. The States are given to June 1, 1968, to establish standards for navigable waters only.

11. Authority to seek immediate injunctive relief to abate pollution in limited cases.

12. A direction to provide the Congress with a cost estimate and study of the pollution control program for the purpose of evaluating the program.

The draft bill also transfers the administration of the Oil Pollution Act of 1924 from the Secretary of the Army to the Secretary of the Interior and strengthens its provisions. It also amends the Refuse Act by adding a condition that the Secretary of the Interior be consulted with regard to the deposit of refuse.

H.R. 16076 and the Senate-passed bill have some additional provisions not included in the enclosed draft bill. The principal ones are:

First, a provision in the Senate-passed bill directing the Secretary to conduct a 3-year, \$3 million study of the effects of pollution on the Nation's estuaries, fish and wildlife, recreation, water supply and water power, and other beneficial purposes. There is now pending before the Committee on Merchant Marine and Fisheries of the House of Representatives a bill, H.R. 13477, which authorizes a similar study and the establishment of a nationwide estuarian system. We have recommended enactment of that bill with amendments. We prefer it over this provision in the Senate-passed bill.

Second, a provision in both bills authorizing long-term, low-interest loans to communities to finance the local share of waste treatment projects. It is aimed primarily at depressed areas. This authority is unneeded. The Public Works and Economic Development Act of 1965 provides supplemental grants and loans to these areas. In addition, the Appalachian Regional Development Act of 1965 can provide supplemental grants for waste treatment works in Appalachia. These acts are aimed at the problem presented by this loan provision. Thus, this loan provision is unnecessary to meet the problems of these

areas. It duplicates these authorities. We recommend against the inclusion of this provision in the bill.

Third, a provision in both bills calling for a study of boats and vessel pollution by July 1, 1967. Section 8 of Executive Order 11258 directs this Department to conduct a comprehensive study of water pollution from vessel operations within the United States and the results made available to the President by January 1, 1967. The study covers vessels using the Great Lakes and vessels and boats of all types. We believe, therefore, that this provision in the bill is unnecessary. We are sure the President will furnish the Congress with the results of the study.

The Department of the Army has reviewed the enclosed draft bill and this letter. That agency advises that the provisions in this draft

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bill effectively carry out the recommendations of the Department of the Army set forth in their letter of July 14, 1966, to your committee on H.R. 16076.

I recommend, and the Department of the Army has advised the Bureau of the Budget that it also recommends the early enactment of the enclosed draft bill which will carry out the President's objectives as set forth in his message on the "Preservation of Our Natural Heritage," in lieu of the provisions of H.R. 13104, H.R. 16076, and the Senate-passed bill S. 2947.

The Bureau of the Budget advises that this draft bill is in accord with the program of the President.

STEWART L. UDALL,  
*Secretary of the Interior.*

A BILL To amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such Act.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966.*

#### TITLE I

SEC. 101. The Federal Water Pollution Control Act, as amended, is amended by inserting immediately after section 16 a new title to read as follows:

#### "TITLE II—CLEAN RIVERS RESTORATION PROGRAM

##### "DECLARATION OF POLICY

"SEC. 201. It is the purpose of this title to reclaim, restore, and maintain the quality of the Nation's rivers, lakes, coastal waters, and

other public waterways through the preparation and development of comprehensive river basin pollution control and abatement plans, and through the establishment of economic incentives, which will encourage the establishment of the most effective and economical waste treatment facilities in the Nation's river basins consistent with water quality standards established under section 10(c) of this Act.

#### “DEFINITIONS

“SEC. 202. For the purposes of this title—

“(1) the term ‘river basin’ includes, but is not limited to, land areas drained by a river and its tributaries, coastal waters, estuaries, bays, and lakes, or portions thereof.

“(2) the term ‘planning agency’ includes, but is not limited to, interstate agencies, or commissions established by or pursuant to an agreement or compact approved by the Congress.

“(3) the term ‘local, State, or interstate agencies’ includes States, municipalities, and other political subdivisions of a State, public corporate bodies, public agencies and instrumentalities of one or more States, Indian tribes, conservancy districts,

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interstate agencies, or commissions established by or pursuant to an agreement or compact approved by the Congress.

“(4) the term ‘construction’ includes preliminary planning to determine the economic and engineering feasibility of treatment works, the engineering, architectural, legal, fiscal, and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary to the construction of treatment works; and the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works; and the inspection and supervision of the construction of treatment works.

#### “PLANNING AGENCIES

“SEC. 203. In furtherance of the purpose of this title, the Secretary shall, in consultation with the Governor or Governors of the States within a river basin, designate a planning agency for those river basins which provide the most significant pollution control problems to the State or region involved from the standpoint of the use and value of the waters therein for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses. Each planning agency shall be a River Basin Commission established by the President or an agency designated by such commission, or, if the Secretary, after consultation with the heads of

other interested Federal agencies and the Governors of the States involved, believes that there are compelling reasons not to designate such a commission or an agency designated by such commission, he may designate some other organization which shall have adequate representation of appropriate Federal, State, interstate, local, or when appropriate, international interests in the river basin involved.

“COMPREHENSIVE RIVER BASIN PLANS FOR POLLUTION CONTROL

“SEC. 204. (a) Each planning agency designated by the Secretary under this title shall, within a reasonable time after such designation, develop a comprehensive river basin pollution control and abatement plan that is a part of or consistent with a comprehensive river basin water resources plan for the river basin for which the planning agency is designated for the implementation and enforcement of water quality standards established pursuant to section 10 (c) of this Act. Prior to the designation of any planning agency, the Secretary shall, with the approval of the President, establish guidelines concerning the designation of such planning agencies and the development and approval of such a plan for the river basin involved.

“(b) Each planning agency designated pursuant to this title shall, from time to time, submit to the Secretary preliminary reports on the progress made by such agency in developing a comprehensive pollution control and abatement plan.

“SUBMISSION OF PLANS

SEC. 205. Upon completion of a proposed comprehensive pollution control and abatement plan, each planning agency shall transmit the plan to the Governor of each State, each interstate agency, international commission, and each local agency covered by the plan. Each

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person, agency, or commission shall have sixty days from the date of the receipt of the proposed plan to submit views, comments, and recommendations. The planning agency shall consider such views, comments, and recommendations and may make appropriate changes or modifications in the proposed plan. The planning agency shall then submit the proposed plan to the Secretary together with the views, comments, and recommendations of each such person, agency, or international commission.

“REVIEW WITHIN FEDERAL GOVERNMENT

“SEC. 206. (a) Upon receipt of a proposed comprehensive river basin pollution control and abatement plan from a planning agency, the Secretary shall transmit it to the Secretary of Health, Education

and Welfare, the Secretary of Housing and Urban Development, the Water Resources Council, and, when appropriate, the Secretary of State, for review.

“(b) The Secretary of Health, Education, and Welfare, the Secretary of Housing and Urban Development, the Water Resources Council, and, when appropriate, the Secretary of State, shall notify the Secretary of the Interior, within sixty days, of the results of their review.

“(c) The Secretary shall review the plan and the views, comments, and recommendations received under section 205 of this title and subsection (b) of this section, and, if he determines that the plan is consistent with the guidelines established pursuant to this title and will adequately and effectively maintain the waters within the river basin covered by the plan at the level of quality established by the applicable water quality standards for those waters, he shall approve the plan.

#### “GRANT PROGRAM FOR TREATMENT WORKS

“SEC. 207. (a) Whenever a comprehensive river basin pollution control and abatement plan for any river basin is approved by the Secretary and water quality standards consistent with section 10 (c) of this Act for the waters covered by the plan are established, the Secretary may accept applications from and make grants to local, State, or interstate agencies from funds appropriated pursuant to section 8(d) of this Act to assist in financing the construction of treatment works within such basin subject to the following limitations:

“(1) the amount of the grant shall not exceed 50 per centum of the estimated reasonable construction costs of such treatment works;

“(2) no application for grants under this section to assist in financing the construction of such treatment works in the area covered by the plan shall be approved until the Secretary determines that the proposed treatment works (a) are consistent with and carry out the purpose of this Act, (b) will be properly and efficiently operated and maintained, (c) are designed so that an adequate capacity will be available to serve the reasonably foreseeable growth needs of the area, (d) when located, in whole or in part, in urbanized area, meet the same requirements with respect to planning and programming as shall have been prescribed by the Secretary of Housing and Urban Development with re-

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spect to water and sewer projects under title VII of the Housing and Urban Development Acts of 1965, and (e) provide, when



appropriate, for joint waste treatment; and

“(3) grants made under this section shall not be available to assist in financing the construction of any treatment works which are receiving a Federal grant under other provisions of law: *Provided*, That a Federal grant made pursuant to this section may be increased above the percentage in paragraph (1) of this subsection by supplemental grants made pursuant to the Appalachian Regional Development Act of 1965, title I of the Public Works and Economic Development Act of 1965, or title I of the Housing and Urban Development Act of 1966.

“(b) In order to prevent delays in providing adequate treatment of wastes to meet the water quality standards established consistent with section 10 (c) of this Act for the waters within a river basin for which a planning agency is designated, the Secretary, whenever he determines, based on preliminary reports submitted by the planning agency that proposed treatment works will substantially conform to a comprehensive river basin pollution control and abatement plan developed by that agency, may accept applications from applicants to local, State, or interstate agencies in accordance with the provisions of subsection (a) of this section. No application under this subsection shall be approved after three years from the date of designation of a planning agency unless a comprehensive river basin pollution control and abatement plan for the basin involved is approved.

The provisions of section 8 (b) of this Act shall not apply to grants made pursuant to this section.

#### “APPROVAL OF GRANTS FROM OTHER AGENCIES

“(c) After the Secretary approves a comprehensive river basin pollution control and abatement plan for any river basin, an application for a grant to assist in financing the construction of treatment works in such basin made under any other provision of law shall not be approved by the head of any other Federal agency, by the Appalachian Regional Commission or other regional commissions established pursuant to the Public Works and Economic Development Act of 1965 unless it substantially conforms, in the judgment of the Secretary, to such plan.

#### “AUTHORIZATION OF PLANNING EXPENSES

“SEC. 209. (a) In carrying out the provisions of section 204 of this title, the Secretary is authorized to pay such expenses of each planning agency as are necessary to implement the formulation of the plan. Each planning agency shall prepare a budget annually and transmit it to the Secretary.

“(b) There are authorized to be appropriated such funds as may be necessary to carry out the provisions of this section, which sums shall be available until expended.

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“OTHER AUTHORITY NOT AFFECTED

“SEC. 210. Nothing in this Act shall be construed to displace, supersede, limit, or modify any interstate compact or the jurisdiction or responsibility of any legally established joint or common agency of two or more States, or two or more States and the Federal Government or to affect the jurisdiction, powers, or prerogatives of the International Joint Commission, United States and Canada, the Permanent Engineering Board and the United States operating entity or entities established pursuant to the Columbia River Basin Treaty, signed at Washington, January 17, 1961, or the International Boundary and Water Commission, United States and Mexico.”

TITLE II

SEC. 201. The Federal Water Pollution Control Act, as amended, is amended by inserting before the heading above section 1:

“TITLE I—WATER POLLUTION CONTROL PROGRAM”

SEC. 202. Section 5(d) (2) of the Federal Water Pollution Control Act, as amended, is amended as follows:

“(2) For the purposes of this subsection there is authorized to be appropriated \$20,000,000 for fiscal year 1967 and such sums as may be appropriated thereafter, sums so appropriated to remain available until expended.”

SEC. 203. Section 6 of the Federal Water Pollution Control Act, as amended, is amended to read as follows:

“GRANTS FOR RESEARCH AND DEVELOPMENT

“SEC. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of—

“(1) assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other wastes from sewers which carry storm water or both storm water and sewage or other wastes, or

“(2) assisting in the development of any project which will demonstrate advanced waste treatment and water purification methods or new or improved methods of joint treatment systems for municipal and industrial wastes,

and for the purpose of reports, plans, and specifications in connection therewith. The Secretary is authorized to provide for the conduct of research and demonstrations relating to the purpose set forth in clause (1) or (2) by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes, except that not to exceed 25 percentum of the total amount appropriated under authority of this section for any fiscal year may be expended during such fiscal year.

“(b) Federal grants under this section shall be subject to the following limitations:

“(1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the ap-

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propriate State water pollution control agency or agencies and by the Secretary;

“(2) No grant shall be made for any project in an amount exceeding 75 per centum of the estimated reasonable cost thereof as determined by the Secretary; and

“(3) No grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration for the purpose set forth in clause (1) or (2) of subsection (a).

“(c) For the purposes of this section there are authorized to be appropriated—

“(1) for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in clause (1) of subsection (a), including contracts pursuant to such subsection for such purpose; and

“(2) for the fiscal year ending June 30, 1967, and for each of the next four succeeding fiscal years, the sum of \$25,000,000 per fiscal year for the purpose set forth in clause (2) of subsection (a), including contracts pursuant to such subsection for such purpose;

“(d) Sums appropriated pursuant to this section shall remain available until expended. No grant or contract for the purpose of subsection (a) of this section shall be made for any project in any fiscal year in an amount exceeding 12½ percent of the total amount authorized for that year.”

SEC. 204. Subsection (a) of section 7 of the Federal Water Pollution Control Act is amended by striking out “and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968,

\$5,000,000” and inserting in lieu thereof “for each succeeding fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1972, \$10,000,000”.

SEC. 205. Effective after June 30, 1967, subsection (b) of section 8 of the Federal Water Pollution Control Act is amended to read as follows:

“(b) Federal grants under this section shall be subject to the following limitations:

“(1) no grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act;

“(2) no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary, or \$2,400,000, whichever is smaller: *Provided*, That the grantee agrees to pay the remaining cost: *Provided further*, That, in the case of a project which will serve more than one municipality, the Secretary shall, on such basis as he determines to be reasonable and equitable, allocate, to each municipality to be served by such project its share of the estimated reasonable cost of such project, and the total of all the amounts so determined, or \$9,600,000, whichever is smaller, shall be the maximum amount of the grant which may be made under this section for such project;

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“(3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; and

“(4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 of this Act and has been certified by the State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs. The limitations of \$2,400,000 and \$9,600,000 imposed by paragraph (2) of this subsection shall not apply in the case of grants made under this section from funds allocated under the third sentence of subsection (c) of this section if the State agrees to match all Federal grants made from such allocation for projects in such State.”

SEC. 206. The third sentence of section 8 (c) of the Federal Water Pollution Control Act, as amended, is amended by changing the period at the end thereof to a colon and inserting the following:

*“Provided, That not more than 60 percent of such sums shall be available without regard to the allocation formula in this sentence to the Secretary to carry out the provisions of section 206 of this Act.”*

SEC. 207. (a) Subsection (d) of section 8 of the Federal Water Pollution Control Act, as amended, is amended by striking out all beginning with “and \$150,000,000 for the fiscal year ending June 30, 1967” through the end of such subsection and inserting in lieu thereof the following: \$200,000,000 for the fiscal year ending June 30, 1967, \$250,000,000 for the fiscal year ending June 30, 1968, \$400,000,000 for the fiscal year ending June 30, 1969, \$650,000,000 for the fiscal year ending June 30, 1970, \$950,000,000 for the fiscal year ending June 30, 1971, and \$1,000,000,000 for the fiscal year ending June 30, 1972. Sums so appropriated shall remain available until expended.”

(b) The first sentence of subsection (g) of section 8 of the Federal Water Pollution Control Act, as amended, is amended by changing the words “this section” to “this Act”.

SEC. 208. Section 10 (c) of the Federal Water Pollution Act, as amended, is amended by substituting for the words “interstate waters”, wherever they appear, the words “interstate and navigable waters” and by adding a new paragraph “(8)” at the end thereof to read as follows:

“(8) The Governor of a State or a State water pollution control agency shall have one year from the date of enactment of this paragraph to file a letter of intent that such State, after public hearings, will before June 30, 1968, adopt water quality criteria and a plan, as provided in this subsection, for navigable waters or portions thereof.”

SEC. 209. (a) Section 10 (d) of the Federal Water Pollution Control Act is amended by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively, and by inserting before such paragraphs a new paragraph as follows:

“(2) Whenever the Secretary, upon receipt of reports, surveys, or studies from any duly constituted international agency or from the Secretary of State, has reason to believe that any

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pollution referred to in subsection (a) of this section which endangers the health or welfare of persons in a foreign country is occurring, and the Secretary of State requests him to abate

such pollution, he shall give formal notification thereof to the State water pollution control agency of the State in which such discharge or discharges originate and to the interstate water pollution control agency, if any, and shall call promptly a conference of such agency or agencies, if he believes that such pollution is occurring in sufficient quantity to warrant such action. The Secretary, through the Secretary of State, shall invite the foreign country which may be adversely affected by this pollution to attend and participate in the conference, and the representative of such country shall, for the purpose of the conference and any further proceeding resulting from such conference, have all the rights of a State water pollution control agency. Nothing in this paragraph shall be construed to modify, amend, repeal, or otherwise affect the provision of the 1909 Boundary Waters Treaty between Canada and the United States relative to the control and abatement of water pollution in waters covered by that treaty."

(b) Section 10(d)(2) of the Federal Water Pollution Control Act is amended to insert after the first sentence thereof the following: "In addition, it shall be the responsibility of the chairman of the conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference."

SEC. 210. Section 10 of the Federal Water Pollution Control Act, as amended, is amended by adding two new subsections to read as follows:

"(k) (1) In connection with any conference called under this section the Secretary is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution, or whose activities may affect the quality of the waters involved in such conference, to file with him, in such form as he may prescribe, a report, based on existing data, furnishing to the Secretary such information as may reasonably be required as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. After such conference has been filed, the Secretary shall require such additional reports relative to such discharges and the use of facilities and other means to prevent or reduce such discharges to the extent recommended by such conference. Such report shall be made under oath or otherwise, as the Secretary may prescribe, and shall be filed with the Secretary within such reasonable period as the Secretary may prescribe, unless additional time be granted by the Secretary. No person shall be required in such report

to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

“(2) If any person required to file any report under this subsection shall fail to do so within the time fixed by the Secretary for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of \$100 for each and every day of the continuance

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of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business: *Provided*, That the Secretary may upon application therefor remit or mitigate any forfeiture provided for under this subsection and he shall have authority to determine the facts upon all such applications.

“(3) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.

“(1) If the Secretary believes, based on studies, reports, or inspections made by him, that actual or threatened pollution deriving from an identifiable source presents an imminent danger to the health or welfare of persons, or to natural resources, or to areas of significant scenic or recreational value, and if he believes that no other effective means of protection are available, he may request the Attorney General to seek appropriate relief to abate the actual or threatened pollution. The authority to seek such relief shall not be limited by other abatement procedures established under this Act.”

SEC. 211. The Federal Water Pollution Control Act, as amended, is amended by adding immediately after section 16 a new section to read as follows:

“SEC. 17. In order to provide the basis for evaluating programs authorized by this Act, the development of new programs, and to furnish the Congress with the information necessary for authorization of appropriations for fiscal years beginning after June 30, 1972, the Secretary, in cooperation with State water pollution control agencies and other water pollution control planning agencies, shall make a detailed estimate of the cost of carrying out the provisions of this Act; a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and a comprehensive anal-

ysis of the national requirements for and cost of treating municipal, industrial, and other effluent to attain such water quality standards as established pursuant to the Federal Water Pollution Control Act, as amended, or applicable State law. The secretary shall submit these studies to the President, together with his recommendations, by January 1, 1970, and the President shall submit to the Congress such studies and such recommendations as he deems appropriate. There are authorized to be appropriated such funds as may be necessary to carry out these studies."

SEC. 212. Section of the Act of March 3, 1899 (30 Stat. 1152; 33 U.S.C. 407), is amended by inserting after "Army," in the second proviso the following: "after consulting with the Secretary of the Interior".

SEC. 213. Sections 2 through 8 of the Oil Pollution Act, 1924 (43 Stat. 604; 33 U.S.C. 432-437), are amended to read as follows:

"SEC. 2. When used in this Act, unless the context otherwise requires—

"(a) 'oil' means oil of any kind or in any form, including fuel oil, sludge, and oil refuse;

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"(b) 'person' means an individual, company, partnership, corporation, or association; any owner, operator, master, officer, or employee of a vessel; any owner, operator, officer, or employee of a shore installation or terminal facility; and any officer, agency, or employee of the United States;

"(c) 'terminal facility' means any pier, wharf, dock, or similar structure to which a vessel may be moored or secured, or upon, within, or contiguous to which equipment and appurtenances dealing with oil may be located, including, but not limited to, storage tanks, pipelines, pumps, and oil trucks;

"(d) 'shore installation' means any building, group of buildings, manufacturing or industrial plants, or equipment of any kind adjacent to coastal, interstate, or navigable waters, and adjoining shorelines of the United States, upon, within, or contiguous to which equipment and appurtenances dealing with oil may be located, including, but not limited to, storage tanks, pipelines, pumps, and oil trucks;

"(e) 'discharge' means any accidental, negligent, or willful spilling, leaking, pumping, pouring, emitting, emptying, or other release of liquid; and

"(f) 'Secretary' means the Secretary of the Interior.

SEC. 3. (a) Except in case of emergency imperiling life or



property, or unavoidable accident, collision, or stranding, and except as otherwise permitted by regulations prescribed by the Secretary, it is unlawful for any person to discharge or permit the discharge from any boat, vessel, shore installation, or terminal facility of oil by any method, means, or manner into or upon the coastal, interstate, or navigable waters, and adjoining shorelines of the United States.

“(b) Any person violating subsection (a) of this section shall remove the oil from the coastal, interstate, or navigable waters, and adjoining shorelines immediately. If such person fails to do so, the Secretary may remove the oil or may arrange for its removal, and such person shall be liable to the United States, in addition to the penalties prescribed in section 4 of this Act, for all costs and expenses reasonably incurred by the Secretary in removing the oil from the coastal, interstate, or navigable waters, and adjoining shorelines of the United States. When the oil has been discharge from a boat or vessel, these costs and expenses shall constitute a lien on such vessel which may be recovered in proceedings by libel in rem. When the oil has been discharged from a shore installation or terminal facility, these costs and expenses may be recovered in proceedings by libel in personam.

“(c) The Secretary may prescribe regulations which—

“(1) permit the discharge of oil from boats or vessels in such quantities, under such conditions, and at such times and places as in his opinion will not be deleterious to health or marine life or a menace to navigation, or dangerous to persons or property engaged in commerce on coastal, interstate, or navigable waters of the United States; and

“(2) relate to the loading, handling, and unloading of oil on or contiguous to boats or vessels, shore installations, and terminal facilities.

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“SEC. 4. (a) Any person, other than an owner or operator of a shore installation or terminal facility, who violates section 3 (a) of this Act or the regulations issued thereunder shall, upon conviction thereof, be punished by a fine not exceeding \$2,500, or by imprisonment not exceeding one year, or by both such fine and imprisonment for each offense.

“(b) Any boat or vessel other than a boat or vessel owned and operated by the United States from which oil is discharged in violation of section 3(c) or the regulations issued thereunder shall be liable for a penalty of not more than \$10,000.

Clearance of a boat or vessel liable for this penalty from a port

of the United States may be withheld until the penalty is paid. The penalty shall constitute a lien on the boat or vessel which may be recovered in proceedings by libel in the district court of the United States for any district within which the boat or vessel may be.

“(c) The owner or operator of a shore installation or terminal facility from which oil is discharged in violation of section 3 (a) of this Act or the regulations issued thereunder shall be liable for a penalty of not more than \$10,000 which may be recovered in proceedings by libel in personam in the district court of the United States of the district within which the shore installation or terminal facility is located.

“SEC. 5. The Commandant of the Coast Guard may, subject to the provisions of section 4450 of the Revised Statutes, as amended (46 U.S.C. 239), suspend or revoke a license issued to the master or other licensed officer of any boat or vessel found violating the provisions of section 3 of this Act.

“SEC. 6. In the administration of this Act the Secretary may, with the consent of the Commandant of the Coast Guard or the Secretary of the Army, make use of the organization, equipment, and agencies including engineering, clerical, and other personnel employed by the Coast Guard or the Department of the Army for the preservation and protection of coastal, interstate, or navigable waters. The officers and agents of the United States in charge of river and harbor improvements, and persons employed under them by authority of the Secretary of the Army, and persons employed by the Secretary, and officers of the Customs and Coast Guard of the United States shall have power and authority and it shall be their duty to swear out and process and to arrest and take into custody, with or without process, any person who may violate any of said provisions: *Provided*, That no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid officials: *Provided further*, That whenever any arrest is made under the provisions of this Act, the person so arrested shall be brought before a commissioner, judge, or court of the United States for examination of the offenses alleged against him and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.

“SEC. 7. This Act shall be in addition to other laws for the preservation and protection of interstate or navigable waters and shall not be construed as repealing, modifying, or in any manner affecting the provisions of such laws.

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"SEC. 8. The Secretary is authorized to issue such regulations as he deems necessary to carry out the provisions of this Act."

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INTERNATIONAL JOINT COMMISSION,  
Washington, D.C., July 13, 1966.

HON. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,*  
*House of Representatives, Washington, D.C.*

DEAR CONGRESSMAN FALLON: Replying to your letter of July 7, requesting views of the International Joint Commission on H.R. 16076, I wish to advise that since this is an international commission, the membership of which is equally divided between the United States and Canada, it is not felt appropriate that it should comment upon proposed legislation pending in either country.

Please be sure however of our desire to be of whatever assistance is possible to your committee by way of furnishing any information we may have.

Sincerely yours,

MATTHEW L. WELSH,  
*Chairman, U.S. Section:*

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U.S. DEPARTMENT OF JUSTICE,  
OFFICE OF THE DEPUTY ATTORNEY GENERAL,  
Washington, D.C., July 29, 1966.

HON. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,*  
*House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Department of Justice on H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

Section 1 of the bill provides a short title for it.

Section 2 of the bill amends section 5 of the Federal Water Pollution Control Act, 33 U.S.C. 466, et seq., by authorizing appropriations in increased amounts for research, investigations, training and information, and section 5 is also amended by adding at the end thereof a new subsection providing that the Secretary of the Interior in consultation with others shall conduct a study of the extent of pollution from boats on the Great Lakes and other navigable waters and make recommendations to Congress.

Section 3 of the bill amends section 6 of the act to read as set out in the bill. This section relates to "Grants for Research and Development."

Section 4 of the bill amends subsection (a) of section 7 of the act and relates to grants for water pollution control programs.

Section 5 of the bill amends subsection (b) of section 8 of the act and relates to grants to States, municipalities, intermunicipal, or interstate agencies for the construction of treatment works.

Section 6 of the bill further amends section 8 relating to grants.

Section 7 of the bill amends subsection (d) of section 8 of the act relating to authorizations for appropriations.

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Section 8 is further amended by adding at the end thereof a new subsection providing that the Secretary of the Interior may make loans to a State, municipality, or intermunicipal or interstate agency under certain conditions.

Section 9 amends section 10(d) (1) of the act (relating to enforcement) by inserting after the last sentence therein a provision to the effect that whenever the Secretary has reason to believe that any pollution referred to in subsection (a) of section 10 which endangers the health or welfare of persons in a foreign country and the Secretary of State requests him to abate such pollution, he shall give notice to the State water pollution control agency of the State in which such discharge originates and shall call a conference of such agency or agencies if the effect of the pollution is of sufficient significance. The foreign country affected shall be invited to attend the conference and have all of the rights of a State water pollution control agency. This provision shall apply only to a foreign country which has given the United States essentially the same rights.

Section 10(d)2 of the act relating to conferences called by the Secretary relating to enforcement proceedings is amended by adding the following: "In addition, it shall be the responsibility of the Chairman of the Conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference."

Section 10 of the act is further amended by adding a new subsection (k) which provides that the Secretary, in any conference called by him, is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution, or whose activities may affect the quality of the subject waters, to file with him a report furnishing such information as may reasonably be required as to the character, kind, and quantity of such discharges and the facilities used to prevent or reduce such discharges. No person shall be required in such report to divulge trade secrets or secret processes and all information reported shall be considered confidential for the purposes of section 1905 of title 18 U.S.C. A penalty is provided for the failure to file any report under this subsection of \$100 for each

day of such failure which shall be recovered by a civil suit and it shall be the duty of the various U.S. attorneys under the direction of the Attorney General to prosecute for the recovery of such forfeitures.

Section 12 of the bill amends the act by redesignating sections and adding two new sections under the headings "Clean Rivers Restoration Program," and "Cost and Economic Study."

A planning agency is created to develop a comprehensive plan consistent with a river basin and resources plan and water quality standards established for interstate waters within the basin, and for other stated purposes. Grants may be made by the Secretary to assist in the financing of treatment works under enumerated conditions.

The act is further amended under the heading "Cost and Economic Impact Study" (p. 21) by adding new section 13. This section requires the Secretary to make a detailed estimate of the cost of carrying out the provisions of the act and to submit a detailed estimate to Congress not later than June 10, 1968, and to update such study each year thereafter.

Section 13 of the bill amends the Refuse Act of 1899 (30 Stat. 1152; 33 U.S.C. 407). This act provides, in brief, that it shall be unlawful

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to discharge or deposit refuse matter of any kind other than that flowing from streets and sewers into any of the navigable waters of the United States. The Refuse Act further provides that the Secretary of the Army, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be impaired thereby, may permit the deposit of any such material in navigable waters, within limits to be defined and under conditions to be prescribed by him.

The bill would amend this act by inserting after the word "thereby" in the second proviso (summarized above) the following, "and whenever the Secretary of the Interior determines that it is consistent with the purposes of the Federal Water Pollution Control Act (33 U.S.C. 466, et seq.)." This amendment would make it clear that no permission could be granted by the Secretary of the Army to deposit any refuse matter into navigable waters, unless it was determined by the Secretary of the Interior that the deposit of such refuse would be consistent with the purposes of the Federal Water Pollution Control Act.

Section 14 of the bill amends the Oil Pollution Act (33 U.S.C. 432) by revising it entirely. The administration of the act would be transferred from the Secretary of the Army to the Secretary of the Interior by changing the meaning of the term "Secretary" (p. 23 of the bill). The act would be broadened as indicated below.

Section 2 of the act as amended (p. 22 of the bill) adds the following to the definition of a "person," "any owner, officer, or employee of a

shore installation or terminal facility," and the terms "shore installation" and "terminal facility" are defined. The term "discharge" is not defined in the present act but is defined by the bill as "any accidental, negligent, or willful spilling, leaking, pumping, pouring, emitting, emptying or other release of liquid."

Section 3 (a) adds a provision making it unlawful to discharge oil from a shore installation or terminal facility. The present law is confined to boats and vessels.

Section 3 (b) adds provisions not contained in the present act, summarized as follows:

Any person discharging oil by any means described above shall remove it from the coastal, interstate or navigable waters immediately. If such person fails to do so, the Secretary may remove the oil and such person shall be liable to the United States for the costs of removal in addition to the penalties provided.

The Secretary may prescribe regulations which permit the discharge of oil from boats and vessels under certain conditions and which relate to the loading, handling, and unloading of oil and to the removal or cost of removal, or both, of oil from interstate or navigable waters.

Penalties for the violation of the provisions of the act and the regulations prescribed are provided (p. 25 of the bill).

Although many of the provisions of the bill do not concern this Department, the amendments to the Refuse Act and the Oil Pollution Act would, it is believed, be of help in the enforcement of laws relating to the pollution of waters. Also, the amendment to the Oil Pollution Act by section 3 (b) of the act, as amended (p. 23 of the bill), with reference to the removal of oil from coastal, interstate or navigable waters, is desirable because it would act as a deterrent.

The amendment of section 10 (d) (2) of the present act which provides that every person contributing to the alleged pollution or

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affected by it be given an opportunity to make a full statement of his views to the conference is proper although the opportunity would no doubt be permitted anyway.

It is recommended that section 11 of the bill which amends section 10 of the act by adding a new subsection (k) (1) be amended. The recommended amendment would be to strike out the comma following the word "processes", to insert in lieu thereof a period (line 4, p. 13 of the bill), and to strike out the remainder of the sentence following the comma which reads, "and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code." This would result in this provision reading

as follows: "No person shall be required in such report to divulge trade secrets or secret processes."

For the purpose of convenience and clarity, section 1905 is quoted in its entirety; it reads as follows:

"§1905. Disclosure of confidential information generally

"Whoever, being an officer or employee of the United States or of any department or agency thereof, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association; or permits any income return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law; shall be fined not more than \$1,000, or imprisoned not more than one year, or both; and shall be removed from office or employment." June 25, 1948, c. 645, 62 Stat. 791.

The reasons for recommending the elimination of the language quoted above are as follows:

1. The language left in the bill protects the person furnishing the report by providing that "No person shall be required in such report to divulge trade secrets or secret processes." To the extent that any alleged polluter of water is concerned, this provision appears to be sufficient. Section 1905 further prohibits the divulging of any information not authorized by law, and mentions "trade secrets."

2. The language to be stricken, if left in the bill, would broaden section 1905, in effect it would amend it so as to subject officers or employees of the United States under this act to a penalty not exacted from others. The only reference to confidential matters in the statute is to "confidential statistical data" and the bill would make "all information reported" subject to the statute. In view of this all-inclusive provision a cloud would be cast on the use of all the information contained in the report, and uncertainty and confusion would exist as to the extent any information obtained could be used.

3. Proceedings under the act could be delayed by the claim that the use of all information contained in the report was prohibited

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and it could become necessary to obtain a court interpretation on this question before proceeding, and, if such illegal information were used, the claim might be made that its use nullified the entire proceeding.

4. Officers and employees under the Water Pollution Control Act should not be subject to a fine of \$1,000 and imprisonment of 1 year arising from the use of information contained in a report unless it involved trade secrets or secret processes or use not authorized by law as now provided.

Whether this legislation should be enacted involves considerations as to which the Department of Justice defers to the Department of the Interior. However, if it is to be enacted this Department believes that it should first be amended as indicated above.

The Bureau of the Budget has advised that there is no objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

RAMSEY CLARK,  
*Deputy Attorney General.*

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DEPARTMENT OF LABOR,  
OFFICE OF THE SECRETARY,  
*Washington, July 20, 1966.*

HON. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,  
House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your letter dated July 7, 1966, requesting our views on H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to the act. The bill may be cited as the "Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966."

The Federal Water Pollution Control Act vests no responsibilities in the Department of Labor except those relating to administration of certain labor standards applicable to construction of sewerage treatment works under section 8. Our comments are therefore limited to the matter of labor standards.

The bill would make a substantial addition to the Federal Water Pollution Control Act by inserting in new sections 12 and 13, a clean rivers restoration program contemplating the making of grants by the Secretary of the Interior for construction pursuant to comprehensive



pollution control and abatement plans. Appropriately, the new section 12(f) would apply to this construction the same labor standards as now apply to construction of sewerage treatment works under section 8.

We suggest that the same labor standards be similarly applied in the amended section 6 in the case of grants for the development of demonstration projects for methods of (1) controlling the discharge of untreated or inadequately treated sewage and other wastes from sewers which carry storm water or both storm water and sewage, or (2) advanced waste treatment and water purification or new improved methods of joint treatment systems for municipal and industrial wastes. Such projects may possibly involve some construction work.

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The Davis-Bacon Act itself would appear applicable to demonstration projects involving construction work undertaken through contracts by the Secretary of the Interior under section 6.

Time has not permitted receiving the advice from the Bureau of the Budget as to the relationship of the pending legislation to the program of the President.

Sincerely,

W. WILLIAM WIRTZ,  
*Secretary of Labor.*

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THE GENERAL COUNSEL OF THE TREASURY,  
*Washington, D.C., August 1, 1966.*

Hon. GEORGE H. FALLON,  
*Chairman, Committee on Public Works,  
House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: Reference is made to your request for the views of this Department on H.R. 16076, to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

The proposed legislation would authorize a \$6 billion, 6-year program of grants to municipalities for sewage treatment construction, and a loan program of \$250 million to States and municipalities to assist them in financing their share of construction under grants, when the Secretary of the Interior determines that reasonable non-Federal loans are not available; and a \$45 million a year grant program for the development of methods to demonstrate new or improved methods of controlling pollution from combined sewers, and to demonstrate advanced waste treatment and new methods of joint treatment for municipal and industrial wastes.

In addition, the bill would authorize a study of the extent of pollution from boats and vessels and would establish procedures for international conferences on water pollution. It would authorize the Secretary of the Interior to establish regulations controlling the discharge of oil from boats, and relating to loading, handling, and unloading of oil on boats and vessels, shore installations and terminal facilities; set penalties for the unauthorized discharge of oil; and authorize Coast Guard and Customs officers to assist in administering and enforcing these provisions.

The President, in his message of February 23, 1966, on the preservation of America's natural heritage, proposed a comprehensive attack on water and air pollution, including a clean rivers demonstration program and new Federal powers to control pollution.

The Department recommends favorable consideration by your committee of legislation which incorporates the President's recommendations, in lieu of action on H.R. 16076.

The Department has been advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the submission of this report to your committee.

Sincerely yours,

FRED B. SMITH,  
*General Counsel.*

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SECTION INDEX OF BILL H.R. 16076 AS REPORTED BY  
PUBLIC WORKS COMMITTEE

Entire original bill as introduced was struck out in the line type of bill as reported, pages 1 to 27.

## TITLE I

Following sections are entire new title (title II) to existing Federal Water Pollution Control Act:

Section of bill as reported	New section of existing act	Subject	Bill page
101.....	201-211 .....	Title II—Clean rivers restoration program .....	27-34
	201 .....	Statement of purpose .....	27
	202 .....	Submission of plan .....	27-28
	203 .....	Review of plan .....	28-29
	(a) .....	By agencies .....	28
	(b) .....	By Secretary of Interior .....	29
	204 .....	Congressional approval .....	29
	205 .....	Grant program for treatment works .....	29-31
	(1) .....	Incentive grants .....	29-30
	(2) .....	Supplementary grants .....	30
	(3) .....	Priority .....	30-31
	206 .....	Approval of grants from other agencies .....	31
	207 .....	Administrative expenses .....	31-32
	(1) .....	Intrastate agency .....	31
	(2) .....	Interstate agency .....	31-32
	208 .....	Use of Federal employees .....	32
	209 .....	Specific designations and approvals .....	32-33
	210 .....	Labor standards .....	33
	211 .....	Definitions .....	33-34

## TITLE II

Following sections are amendments to individual sections of existing Federal Pollution Control Act:

Section of bill as reported	Section of existing act amended	Subject	Bill page
201 .....	<i>Preceding sec. 1 of existing act.</i>	<i>Addition of heading "Title I—Water Pollution Control Program."</i>	34
202:			
(a) ....	5(a) .....	Research on combined storm and sanitary sewers and chemical additives.	34
(b) ....	Following 5(c) ...	Research grants to industries .....	34-35
(c) ....	5(d) .....	Research—Elimination of separate appropriation ceiling on certain kinds of research.	35
(d) ....	Following 5 .....	Estuary study .....	35-38
203:			
(a) ....	6 .....	Cost estimate and study .....	38-39
(b) ....	6 .....	Study of State and local personnel training .....	39
204 .....	7(a) .....	Increase in grants for water pollution control program planning.	39
205(1) ....	8(b) .....	Increase in individual and combined project limitation. ....	39
205(4) ....	8(b) .....	Incentive increase to 40 percent if State matches 30 percent.	40
206 .....	8(d) .....	Increase in construction grants .....	40-41
207 .....	Following 8 .....	Reimbursement .....	41-42
208 .....	10(f) .....	Hearing board and reports .....	42-44
209 .....	13(f) .....	Inclusion of Indian tribes as "Municipalities" .....	44
210 .....	New .....	Transfer of administration of 1924 Oil Pollution Act from Secretary of the Army to Secretary of Interior.	44-45
211 .....	New .....	Study of financial assistance to industry .....	45-46

**CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED**

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in *italic*, existing law in which no change is proposed is shown in roman):

**FEDERAL WATER POLLUTION CONTROL ACT**

AN ACT To provide for water pollution control activities in the Public Health Service of the Department of Health, Education, and Welfare, and for other purposes

**TITLE I—WATER POLLUTION CONTROL PROGRAM****DECLARATION OF POLICY**

**SECTION 1.** (a) The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution.

(b) In connection with the exercise of jurisdiction over the waterways of the Nation and in consequence of the benefits resulting to the public health and welfare by the prevention and control of water pollution, it is hereby declared to be the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States in preventing and controlling water pollution, to support and aid technical research relating to the prevention and control of water pollution, and to provide Federal technical services and financial aid to State and interstate agencies and to municipalities in connection with the prevention and control of water pollution. The Secretary of Health, Education, and Welfare (hereinafter in this Act called "Secretary") shall administer this Act through the Administration created by section 2 of this Act, and with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him, shall supervise and direct (1) the head of such Administration in administering this Act and (2) the administration of all other functions of the Department of Health, Education, and Welfare related to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe.

(c) Nothing in this Act shall be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.

**FEDERAL WATER POLLUTION CONTROL ADMINISTRATION**

**SEC. 2.** Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the "Administration"). The head

of the Administration shall be appointed, and his compensation fixed, by the Secretary. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from the personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge

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the Administration's functions and may for that purpose use funds available for carrying out such functions; and he may delegate any of his functions to, or otherwise authorize their performance by, an officer or employee of, or assigned or detailed to, the Administration.

#### COMPREHENSIVE PROGRAMS FOR WATER POLLUTION CONTROL

SEC. 3. (a) The Secretary shall, after careful investigation, and in cooperation with other Federal agencies, with State water pollution control agencies and interstate agencies, and with the municipalities and industries involved, prepare or develop comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters. In the development of such comprehensive programs due regard shall be given to the improvements which are necessary to conserve such waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses. For the purpose of this section, the Secretary is authorized to make joint investigations with any such agencies of the condition of any waters in any State or States, and of the discharges of any sewage, industrial wastes, or substance which may adversely affect such waters.

(b) (1) In the survey or planning of any reservoir by the Corps of Engineers, Bureau of Reclamation, or other Federal agency, consideration shall be given to inclusion of storage for regulation of streamflow for the purpose of water quality control, except that any such storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source.

(2) The need for and the value of storage for this purpose shall be determined by these agencies, with the advice of the Secretary, and his views on these matters shall be set forth in any report or presentation to the Congress proposing authorization or construction of any reservoir including such storage.

(3) The value of such storage shall be taken into account in determining the economic value of the entire project of which it is a part, and costs shall be allocated to the purpose of water quality control

in a manner which will insure that all project purposes share equitably in the benefits of multiple-purpose construction.

(4) Costs of water quality control features incorporated in any Federal reservoir or other impoundment under the provisions of this Act shall be determined and the beneficiaries identified and if the benefits are widespread or national in scope, the costs of such features shall be nonreimbursable.

#### INTERSTATE COOPERATION AND UNIFORM LAWS

SEC. 4. (a) The Secretary shall encourage cooperative activities by the States for the prevention and control of water pollution; encourage the enactment of improved and, so far as practicable, uniform State laws relating to the prevention and control of water pollution; and encourage compacts between States for the prevention and control of water pollution.

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(b) The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for (1) cooperative effort and mutual assistance for the prevention and control of water pollution and the enforcement of their respective laws relating thereto, and (2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements and compacts. No such agreement or compact shall be binding or obligatory upon any State a party thereto unless and until it has been approved by the Congress.

#### RESEARCH, INVESTIGATIONS, TRAINING, AND INFORMATION

SEC. 5. (a) The Secretary shall conduct in the Department of Health, Education, and Welfare and encourage, cooperate with, and render assistance to other appropriate public (whether Federal, State, interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, control, and prevention of water pollution [.] *including, but not limited to, pollution resulting from the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and the temporary use of new or improved chemical additives which provide substantial immediate improvement to existing treatment processes.* In carrying out the foregoing, the Secretary is authorized to—

(1) collect and make available, through publications and other appropriate means, the results of and other information as to

research, investigations, and demonstrations relating to the prevention and control of water pollution, including appropriate recommendations in connection therewith;

(2) make grants-in-aid to public or private agencies and institutions and to individuals for research or training projects and for demonstrations, and provide for the conduct of research, training, and demonstrations by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes;

(3) secure, from time to time and for such periods as he deems advisable, the assistance and advice of experts, scholars, and consultants as authorized by section 15 of the Administrative Expenses Act of 1946 (5 U.S.C. 55a);

(4) establish and maintain research fellowships in the Department of Health, Education, and Welfare with such stipends and allowances, including traveling and subsistence expenses, as he may deem necessary to procure the assistance of the most promising research fellowships: *Provided*, That the Secretary shall report annually to the appropriate committees of Congress on his operations under this paragraph; and

(5) provide training in technical matters relating to the causes, prevention, and control of water pollution to personnel of public agencies and other persons with suitable qualifications.

(b) The Secretary may, upon request of any State water pollution control agency, or interstate agency, conduct investigations and research and make surveys concerning any specific problem of water  
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pollution confronting any State, interstate agency, community, municipality, or industrial plant, with a view of recommending a solution of such problem.

(c) The Secretary shall, in cooperation with other Federal, State, and local agencies having related responsibilities, collect and disseminate basic data on chemical, physical, and biological water quality and other information insofar as such data or other information relate to water pollution and the prevention and control thereof.

(d) *The Secretary is authorized to make grants to persons for research and demonstration projects for prevention of pollution of waters by industry, including, but not limited to, the treatment of industrial waste. No grant shall be made under this subsection in an amount in excess of \$1,000,000, no grant shall be made for more than 70 per centum of the cost of the project, and no grant shall be made for any project unless the Secretary determines that such project will serve a useful purpose in the development or demonstration of a new or improved method of treating industrial wastes or otherwise pre-*

*venting pollution of waters by industry, which method shall have industry-wide application.*

[(d) (1)] (e) In carrying out the provisions of this section the Secretary shall develop and demonstrate under varied conditions (including conducting such basic and applied research, studies, and experiments as may be necessary):

(A) practicable means of treating municipal sewage and other waterborne wastes to remove the maximum possible amounts of physical, chemical, and biological pollutants in order to restore and maintain the maximum amount of the Nation's water at a quality suitable for repeated reuse;

(B) improved methods and procedures to identify and measure the effects of pollutants on water uses, including those pollutants created by new technological developments; and

(C) methods and procedures for evaluating the effects on water quality and water uses of augmented streamflows to control water pollution not susceptible to other means of abatement.

[(2) For the purposes of this subsection there is authorized to be appropriated not more than \$5,000,000 for any fiscal year, and the total sum appropriated for such purposes shall not exceed \$25,000,000.]

[(e)] (f) The Secretary shall establish, equip, and maintain field laboratory and research facilities, including, but not limited to, one to be located in the northeastern area of the United States, one in the Middle Atlantic area, one in the southeastern area, one in the midwestern area, one in the southwestern area, one in the Pacific Northwest, and one in the State of Alaska, for the conduct of research, investigations, experiments, field demonstrations and studies, and training relating to the prevention and control of water pollution. Insofar as practicable, each such facility shall be located near institutions of higher learning in which graduate training in such research might be carried out.

[(f)] (g) The Secretary shall conduct research and technical development work, and make studies, with respect to the quality of the waters of the Great Lakes, including an analysis of the present and projected future water quality of the Great Lakes under varying conditions of waste treatment and disposal, an evaluation of the water quality needs of those to be served by such waters, and evaluation of municipal, industrial, and vessel waste treatment and disposal prac-

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tices with respect to such waters, and a study of alternate means of solving water pollution problems (including additional waste treatment measures) with respect to such waters.



(h) (1) *The Secretary shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, and encourage contributions to, a comprehensive study of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such study shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.*

(2) *In conducting the above study, the Secretary shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.*

(3) *The Secretary shall submit to the Congress a final report of the study authorized by this subsection not later than three years after the date of enactment of this subsection. Copies of the report shall be made available to all interested parties, public and private. The report shall include, but not be limited to—*

(A) *an analysis of the importance of estuaries to the economic and social well-being of the people of the United States and of the effects of pollution upon the use and enjoyment of such estuaries;*

(B) *a discussion of the major economic, social, and ecological trends occurring in the estuarine zones of the Nation;*

(C) *recommendations for a comprehensive national program for the preservation, study, use, and development of estuaries of the Nation, and the respective responsibilities which should be assumed by Federal, State, and local governments and by public and private interests.*

(4) *There is authorized to be appropriated the sum of \$1,000,000 per fiscal year for the fiscal years ending June 30, 1967, June 30, 1968, and June 30, 1969, to carry out the purposes of this subsection.*

(5) *For the purpose of this subsection, the term "estuarine zones" means an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and the term "estuary" means all or part of the mouth of a navigable or interstate river or stream or other body of water having*

*unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.*

*(i) There is authorized to be appropriated to carry out this section, other than subsection (h), not to exceed \$75,000,000 per fiscal year for each of the fiscal years ending June 30, 1967, June 30, 1968, and June 30, 1969. Not less than 25 per centum of any amounts appropriated to carry out this section for a fiscal year shall be expended during such fiscal year in carrying out subsection (d) of this section.*

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#### [GRANTS FOR RESEARCH AND DEVELOPMENT]

[SEC. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith, The Secretary is authorized to provide for the conduct of research and demonstrations relating to new or improved methods of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes, except that not to exceed 25 per centum of the total amount appropriated under authority of this section for any fiscal year may be expended under authority of this sentence during such fiscal year.

[(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary; (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes.

[ (c) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purposes of this section. Sums so appropriated shall remain available until expended. No grant or contract shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year.]

#### COST ESTIMATE AND STUDY

Sec. 6. (a) *In order to provide the basis for evaluating programs authorized by this Act, the development of new programs, and to furnish the Congress with the information necessary for authorization of appropriations for fiscal years beginning after June 30, 1967, the Secretary, in cooperation with State water pollution control agencies and other water pollution control planning agencies, shall make a detailed estimate of the cost of carrying out the provisions of this Act; a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and a comprehensive analysis of the national requirements for and cost of treating municipal, industrial, and other effluent to attain such water quality standards as established pursuant to this Act or applicable State law. The Secretary shall submit such detailed estimate and such comprehensive study of such cost*

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*for the three-year period beginning July 1, 1968, to the Congress no later than January 10, 1968, such study to be updated each year thereafter.*

(b) *The Secretary shall also make a complete investigation and study to determine (1) the need for additional trained State and local personnel to carry out programs assisted pursuant to this Act and other programs for the same purpose as this Act, and (2) means of using existing Federal training programs to train such personnel. He shall report the results of such investigation and study to the President and the Congress not later than July 1, 1967.*

#### GRANTS FOR WATER POLLUTION CONTROL PROGRAMS

SEC. 7. (a) *There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1961, \$3,000,000, [and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000] for each fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1969,*

\$10,000,000 for grants to States and to interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution.

(b) The portion of the sums appropriated pursuant to subsection (a) for a fiscal year which shall be available for grants to interstate agencies and the portion thereof which shall be available for grants to States shall be specified in the Act appropriating such sums.

(c) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to the several States, in accordance with regulations, on the basis of (1) the population, (2) the extent of the water pollution problem, and (3) the financial need of the respective States.

(d) From each State's allotment under subsection (c) for any fiscal year the Secretary shall pay to such State an amount equal to its Federal share (as determined under subsection (h)) of the cost of carrying out its State plan approved under subsection (f), including the cost of training personnel for State and local water pollution control work and including the cost of administering the State plan.

(e) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to interstate agencies, in accordance with regulations, on such basis as the Secretary finds reasonable and equitable. He shall from time to time pay to each such agency, from its allotment, an amount equal to such portion of the cost of carrying out its plan approved under subsection (f) as may be determined in accordance with regulations, including the cost of training personnel for water pollution control work and including the cost of administering the interstate agency's plan. The regulations relating to the portion of the cost of carrying out the interstate agency's plan which shall be borne by the United States shall be designed to place such agencies, so far as practicable, on a basis similar to that of the States.

(f) The Secretary shall approve any plan for the prevention and control of water pollution which is submitted by the State water pollution control agency or, in the case of an interstate agency, by such agency, if such plan—

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(1) provides for administration or for the supervision of administration of the plan by the State water pollution control agency or, in the case of a plan submitted by an interstate agency, by such interstate agency;

(2) provides that such agency will make such reports, in such form and containing such information as the Secretary may from time to time reasonably require to carry out his functions under this Act;

(3) sets forth the plans, policies, and methods to be followed in carrying out the State (or interstate) plan and in its administration;

(4) provides for extension or improvement of the State or interstate program for prevention and control of water pollution;

(5) provides such accounting, budgeting, and other fiscal methods and procedures as are necessary for the proper and efficient administration of the plan; and

(6) sets forth the criteria used by the State in determining priority of projects as provided in section 8(b) (4).

The Secretary shall not disapprove any plan without first giving reasonable notice and opportunity for hearing to the State water pollution control agency or interstate agency which has submitted such plan.

(g) (1) Whenever the Secretary, after reasonable notice and opportunity for hearing to a State water pollution control agency or interstate agency finds that—

(A) the plan submitted by such agency and approved under this section has been so changed that it no longer complies with a requirement of subsection (f) of this section; or

(B) in the administration of the plan there is a failure to comply substantially with such a requirement,

the Secretary shall notify such agency that no further payments will be made to the State or to the interstate agency, as the case may be, under this section (or in his discretion that further payments will not be made to the State, or to the interstate agency, for projects under or parts of the plan affected by such failure) until he is satisfied that there will no longer be any such failure. Until he is so satisfied, the Secretary shall make no further payments to such State, or to such interstate agency, as the case may be, under this section (or shall limit payments to projects under or parts of the plan in which there is no such failure).

(2) If any State or any interstate agency is dissatisfied with the Secretary's action with respect to it under this subsection, it may appeal to the United States court of appeals for the circuit in which such State (or any of the member States, in the case of an interstate agency) is located. The summons and notice of appeal may be served at any place in the United States. The findings of fact by the Secretary, unless contrary to the weight of the evidence, shall be conclusive; but the court, for good cause shown, may remand the case to the Secretary to take further evidence, and the Secretary may thereupon make new or modified findings of fact and may modify his previous action. Such new or modified findings of fact shall likewise be conclusive unless contrary to the weight of the evidence.

The court shall have jurisdiction to affirm the action of the Secretary or to set it aside, in whole or in part. The judgment of the court shall

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be subject to review by the Supreme Court of the United States upon certiorari or certification as provided in title 28, United States Code, section 1254.

(h) (1) The "Federal share" for any State shall be 100 per centum less that percentage which bears the same ratio to 50 per centum as the per capita income of such State bears to the per capita income of the United States, except that (A) the Federal share shall in no case be more than  $66\frac{2}{3}$  per centum or less than  $33\frac{1}{3}$  per centum, and (B) the Federal share for Puerto Rico and the Virgin Islands shall be  $66\frac{2}{3}$  per centum.

(2) The "Federal shares" shall be promulgated by the Secretary between July 1 and September 30 of each even-numbered year, on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce.

(3) As used in this subsection, the term "United States" means the fifty States and the District of Columbia.

(4) Promulgations made before satisfactory data are available from the Department of Commerce for a full year on the per capita income of Alaska shall prescribe a Federal share for Alaska of 50 per centum and, for purposes of such promulgations, Alaska shall not be included as part of the "United States". Promulgations made thereafter but before per capita income data for Alaska for a full three-year period are available for the Department of Commerce shall be based on satisfactory data available therefrom for Alaska for such one full year or, when such data are available for a two-year period, for such two years.

(i) The population of the several States shall be determined on the basis of the latest figures furnished by the Department of Commerce.

(j) The method of computing and paying amounts pursuant to subsection (d) or (e) shall be as follows:

(1) The Secretary shall, prior to the beginning of each calendar quarter or other period prescribed by him, estimate the amount to be paid to each State (or to each interstate agency in the case of subsection (e)) under the provisions of such subsection for such period, such estimate to be based on such records of the State (or the interstate agency) and information furnished by it, and such other investigation, as the Secretary may find necessary.

(2) The Secretary shall pay to the State (or to the interstate

agency), from the allotment available therefor, the amount so estimated by him for any period, reduced or increased, as the case may be, by any sum (not previously adjusted under this paragraph) by which he finds that his estimate of the amount to be paid such State (or such interstate agency) for any prior period under such subsection was greater or less than the amount which should have been paid to such State (or such agency) for such prior period under such subsection. Such payments shall be made through the disbursing facilities of the Treasury Department, in such installments as the Secretary may determine.

#### GRANTS FOR CONSTRUCTION

SEC. 8. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the construction of necessary treatment works to prevent the discharge of

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untreated or inadequately treated sewage or other waste into any waters and for the purpose of reports, plans, and specifications in connection therewith.

(b) Federal grants under this section shall be subject to the following limitations: (1) No grants shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) except as otherwise provided in this clause, no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary, or in an amount exceeding [\$1,200,000] \$2,400,000, whichever is the smaller: *Provided*, That the grantee agrees to pay the remaining cost: *Provided further*, That, in the case of a project which will serve more than one municipality [(A)] the Secretary shall, on such basis as he determines to be reasonable and equitable, allocate to each municipality to be served by such project its share of the estimated reasonable cost of such project, and shall then apply the limitations provided in this clause (2) to each such share as if it were a separate project to determine the maximum amount of any grant which could be made under this section with respect to each such share, and the total of all the amounts so determined or [\$4,800,000] \$9,600,000, whichever is the smaller, shall be the maximum amount of the grant which may be made under this section on account of such project [, and (B) for the purpose of the limitation in the last sentence of subsection (d), the share of each municipality so determined shall be regarded as a grant

for the construction of treatment works]; (3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; (4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs; and (5) no grant shall be made under this section for any project in any State in an amount exceeding \$250,000 until a grant has been made thereunder for each project in such State (A) for which an application was filed with the appropriate State water pollution control agency prior to one year after the date of enactment of this clause and (B) which the Secretary determines met the requirements of this section and regulations thereunder as in effect prior to the date of enactment of this clause. [The limitations of \$1,200,000 and \$4,800,000 imposed by clause (2) of this subsection shall not apply in the case of grants made under this section from funds allocated under the third sentence of subsection (c) of this section if the State agrees to match equally all Federal grants made from such allocation for projects in such State.] *The percentage limitation of 30 per centum imposed by clause (2) of this subsection shall be increased to 40 per centum, and the dollar limitations imposed by such clause shall not apply, in the case of grants made under this section from funds allocated for a fiscal year to a State under subsection (c) of this section if the State agrees to pay not less than 30 per centum of the estimated reasonable cost (as determined by the Secretary)*

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*of all projects for which Federal grants are to be made under this section from such allocation.*

(c) In determining the desirability of projects or treatment works and of approving Federal financial aid in connection therewith, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for each fiscal year ending on or before



June 30, 1965, and the first \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, as follows: (1) 50 per centum of such sums in the ratio that the population of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the quotient obtained by dividing the per capita income of the United States by the per capita income of each State bears to the sum of such quotients for all the States. All sums in excess of \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States. Sums allotted to a State under the two preceding sentences which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b) (1) of this section and certified as entitled to priority under subsection (b) (4) of this section, shall be reallocated by the Secretary, on such basis as he determines to be reasonable and equitable and in accordance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made because of lack of funds: *Provided, however,* That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or activity. Any sum made available to a State by reallocation under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second, third, and fourth sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this section. For the purposes of this section, population shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce, and per capita income for each State and for the United States shall be determined on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce.

(d) There are hereby authorized to be appropriated for each fiscal year through and including the fiscal year ending June 30, 1961, the sum of \$50,000,000 per fiscal year for the purpose of making grants under this section. There are hereby authorized to be appropriated, for the purpose of making grants under this section, \$80,000,000 for the fiscal year ending June 30, 1962, \$90,000,000 for the fiscal year ending June 30, 1963, \$100,000,000 for the fiscal year ending June 30, 1964, \$100,000,000 for the fiscal year ending June 30, 1965, \$150,000,000 for the fiscal year ending June 30, 1966, [and \$150,000,000 for the fiscal year ending June 30, 1967. Sums so appropriated shall remain available until expended. At least 50 per centum of the funds so appropriated for each fiscal year ending on or before June 30, 1965, and at least 50 per centum of the first \$100,000,000 so appropriated for each fiscal year beginning on or after July 1, 1965, shall be used for grants for the construction of treatment works servicing municipalities of one hundred and twenty-five thousand population or under.] \$150,000,000 for the fiscal year ending June 30, 1967, \$300,000,000 for the fiscal year ending June 30, 1968, \$400,000,000 for the fiscal year ending June 30, 1969, \$650,000,000 for the fiscal year ending June 30, 1970, and \$950,000,000 for the fiscal year ending June 30, 1971. Sums so appropriated shall remain available until expended.

(e) The Secretary shall make payments under this section through the disbursing facilities of the Department of the Treasury. Funds so paid shall be used exclusively to meet the cost of construction of the project for which the amount was paid. As used in this section the term "construction" includes preliminary planning to determine the economic and engineering feasibility of treatment works, the engineering, architectural, legal, fiscal, and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary to the construction of treatment works; and the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works; and the inspection and supervision of the construction of treatment works.

(f) Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 10 per centum of the amount of such grant for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning, for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan

area. For the purposes of this subsection the term "metropolitan area" means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget, except as may be determined by the President as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and

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other activities, which in the opinion of the President lends itself as being appropriate for the purposes hereof.

(g) The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on projects for which grants are made under this section shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C., secs. 276a through 276a-5). The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 9148; 40 U.S.C. 276c).

(h) *If, prior to commencement of construction of any treatment works in advance of the availability of funds for a grant under this section, the Secretary approves such project, and the State, municipality, intermunicipal, or interstate agency thereafter constructs such project and submits an application to the Secretary approved by the appropriate State water pollution control agency or agencies for a grant for such project, the Secretary, upon his approval of such application, is authorized to make a grant under this section for such project to be paid from future appropriations. No such grant shall be made (1) unless all of the provisions of this Act have been complied with to the same extent and with the same effect as though the grant were to be made for future construction of the project, (2) in an amount exceeding a grant which would otherwise be made under this section for the future construction of such project. Neither an approval of the project by the Secretary prior to construction, nor the making of a grant by the Secretary for a project to be paid from a future appropriation, nor any other provision of this subsection, shall*

*be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for a project.*

WATER POLLUTION CONTROL ADVISORY BOARD

SEC. 9. (a) (1) There is hereby established in the Department of Health, Education, and Welfare, a Water Pollution Control Advisory Board, composed of the Secretary or his designee, who shall be chairman, and nine members appointed by the President, none of whom shall be Federal officers or employees. The appointed members, having due regard for the purposes of this Act, shall be selected from among representatives of various State, interstate and local governmental agencies, of public or private interests contributing to, affected by, or concerned with water pollution, and of other public and private agencies, organizations, or groups demonstrating an active interest in the field of water pollution prevention and control, as well as other individuals who are expert in this field.

(2) (A) Each member appointed by the President shall hold office for a term of three years, except that (i) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (ii) the terms of office of the members first taking office after June 30, 1956, shall expire as follows: three at the end of one year after such date, three at the end of two years after such date, and

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three at the end of three years after such date, as designated by the President at the time of appointment, and (iii) the term of any member under the preceding provisions shall be extended until the date on which his successor's appointment is effective. None of the members appointed by the President shall be eligible for reappointment within one year after the end of his preceding term but terms commencing prior to the enactment of the Water Pollution Control Act Amendments of 1956 shall not be deemed "preceding terms" for purposes of this sentence.

(B) The members of the Board who are not officers or employees of the United States, while attending conferences or meetings of the Board or while otherwise serving at the request of the Secretary, shall be entitled to receive compensation at a rate to be fixed by the Secretary, but not exceeding \$50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(b) The Board shall advise, consult with, and make recommendations to the Secretary on matters of policy relating to the activities and functions of the Secretary under this Act.

(c) Such clerical and technical assistance as may be necessary to discharge the duties of the Board shall be provided from the personnel of the Department of Health, Education, and Welfare.

ENFORCEMENT MEASURES AGAINST POLLUTION OF INTERSTATE OR  
NAVIGABLE WATERS

SEC. 10. (a) The pollution of interstate or navigable waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge into a tributary of such waters), which endangers the health or welfare of any persons, shall be subject to abatement as provided in this Act.

(b) Consistent with the policy declaration of this Act, State and interstate action to abate pollution of interstate or navigable waters shall be encouraged and shall not, except as otherwise provided by or pursuant to court order under subsection (h), be displaced by Federal enforcement action.

(c) (1) If the Governor of a State or a State water pollution control agency files, within one year after the date of enactment of this subsection, a letter of intent that such State, after public hearings, will before June 30, 1967, adopt (A) water quality criteria applicable to interstate waters or portions thereof within such State, and (B) a plan for the implementation and enforcement of the water quality criteria adopted, and if such criteria and plan are established in accordance with the letter of intent, and if the Secretary determines that such State criteria and plan are consistent with paragraph (3) of this subsection, such State criteria and plan shall thereafter be the water quality standards applicable to such interstate waters or portions thereof.

(2) If a State does not (A) file a letter of intent or (B) establish water quality standards in accordance with paragraphs (1) of this subsection, or if the Secretary or the Governor of any State affected by water quality standards established pursuant to this subsection

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desires a revision in such standards, the Secretary may, after reasonable notice and a conference of representatives of appropriate Federal departments and agencies, interstate agencies, States, municipalities and industries involved, prepare regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof. If, within six months from the date the Secretary publishes

such regulations, the State has not adopted water quality standards found by the Secretary to be consistent with paragraph (3) of this subsection, or a petition for public hearing has not been filed under paragraph (4) of this subsection, the Secretary shall promulgate such standards.

(3) Standards of quality established pursuant to this subsection shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act. In establishing such standards the Secretary, the Hearing Board, or the appropriate State authority shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

(4) If at any time prior to 30 days after standards have been promulgated under paragraph (2) of this subsection, the Governor of any State affected by such standards petitions the Secretary for a hearing, the Secretary shall call a public hearing, to be held in or near one or more of the places where the water quality standards will take effect, before a Hearing Board of five or more persons appointed by the Secretary. Each State which would be affected by such standards shall be given an opportunity to select one member of the Hearing Board. The Department of Commerce and other affected Federal departments and agencies shall each be given an opportunity to select a member of the Hearing Board and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. The members of the Board who are not officers or employees of the United States, while participating in the hearing conducted by such Hearing Board or otherwise engaged on the work of such Hearing Board, shall be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2), for persons in the Government service employed intermittently. Notice of such hearing shall be published in the Federal Register and given to the State water pollution control agencies, interstate agencies and municipalities involved at least 30 days prior to the date of such hearing. On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether the standards published or promulgated by the Secretary should be approved or modified and transmit its findings to the Secretary. If the Hearing Board approves the standards as published or promulgated by the Secretary, the standards shall take effect on receipt by the Secretary of the Hearing Board's recommendations. If the Hearing Board recommends modifications in the standards as

published or promulgated by the Secretary, the Secretary shall promulgate revised regulations setting forth standards of water quality in accordance with the Hearing Board's recommendations which will become effective immediately upon promulgation.

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(5) The discharge of matter into such interstate waters or portions thereof, which reduces the quality of such waters below the water quality standards established under this subsection (whether the matter causing or contributing to such reduction is discharged directly into such waters or reaches such waters after discharge into tributaries of such waters), is subject to abatement in accordance with the provisions of paragraph (1) or (2) of subsection (g) of this section, except that at least 180 days before any abatement action is initiated under either paragraph (1) or (2) of subsection (g) as authorized by this subsection, the Secretary shall notify the violators and other interested parties of the violation of such standards. In any suit brought under the provisions of this subsection the court shall receive in evidence a transcript of the proceedings of the conference and hearing provided for in this subsection, together with the recommendations of the conference and Hearing Board and the recommendations and standards promulgated by the Secretary, and such additional evidence, including that relating to the alleged violation of the standards, as it deems necessary to a complete review of the standards and to a determination of all other issues relating to the alleged violation. The court, giving due consideration to the practicability and to the physical and economic feasibility of complying with such standards, shall have jurisdiction to enter such judgment and orders enforcing such judgment as the public interest and the equities of the case may require.

(6) Nothing in this subsection shall (A) prevent the application of this section to any case to which subsection (a) of this section would otherwise be applicable, or (B) extend Federal jurisdiction over water not otherwise authorized by this Act.

(7) In connection with any hearings under this section no witness or any other person shall be required to divulge trade secrets or secret processes.

(d) (1) Whenever requested by the Governor of any State or a State water pollution control agency, or (with the concurrence of the Governor and of the State water pollution control agency for the State in which the municipality is situated) the governing body of any municipality, the Secretary shall, if such request refers to pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (caus-

ing or contributing to such pollution) originates, give formal notification thereof to the water pollution control agency and interstate agency, if any, of the State or States where such discharge or discharges originate and shall call promptly a conference of such agency or agencies and of the State water pollution control agency and interstate agency, if any, of the State or States, if any, which may be adversely affected by such pollution. Whenever requested by the Governor of any State, the Secretary shall, if such request refers to pollution of interstate or navigable waters which is endangering the health or welfare of persons only in the requesting State in which the discharge or discharges (causing or contributing to such pollution) originate, give formal notification thereof to the water pollution control agency and interstate agency, if any, of such State and shall promptly call a conference of such agency or agencies, unless, in the judgment of the Secretary, the effect of such pollution on the legitimate uses of the waters is not of sufficient significance to warrant exercise of Federal jurisdiction under this section. The Secretary shall also call such a conference whenever, on the basis of reports, surveys, or

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studies, he has reason to believe that any pollution referred to in subsection (a) and endangering the health or welfare of persons in a State other than that in which the discharge or discharges originate is occurring; or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities.

(2) The agencies called to attend such conference may bring such persons as they desire to the conference. Not less than three weeks' prior notice of the conference date shall be given to such agencies.

(3) Following this conference, the Secretary shall prepare and forward to all the water pollution control agencies attending the conference a summary of conference discussions including (A) occurrence of pollution of interstate or navigable waters subject to abatement under this Act; (B) adequacy of measures taken toward abatement of the pollution; and (C) nature of delays, if any, being encountered in abating the pollution.

(e) If the Secretary believes, upon the conclusion of the conference or thereafter, that effective progress toward abatement of such pollution is not being made and that the health or welfare of any persons is being endangered, he shall recommend to the appropriate State water pollution control agency that it take necessary remedial action. The Secretary shall allow at least six months from the date he makes



such recommendations for the taking of such recommended action.

(f) (1) If, at the conclusion of the period so allowed, such remedial action has not been taken or action which in the judgment of the Secretary is reasonably calculated to secure abatement of such pollution has not been taken, the Secretary shall call a public hearing, to be held in or near one or more of the places where the discharge or discharges causing or contributing to such pollution originated, before a Hearing Board of five or more persons appointed by the Secretary. Each State in which any discharge causing or contributing to such pollution originates and each State claiming to be adversely affected by such pollution shall be given an opportunity to select one member of the Hearing Board and at least one member shall be a representative of the Department of Commerce, and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. At least three weeks, prior notice to such hearing shall be given to the State water pollution control agencies and interstate agencies, if any, called to attend the aforesaid hearing and the alleged polluter or polluters. *It shall be the responsibility of the Hearing Board to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the Hearing Board.* On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether pollution referred to in subsection (a) is occurring and whether effective progress toward abatement thereof is being made. If the Hearing Board finds such pollution is occurring and effective progress toward abatement thereof is not being made it shall make recommendations to the Secretary concerning the measures, if any, which it finds to be reasonable and equitable to secure abatement of such pollution. The Secretary shall send such findings and recommendations to the person or persons discharging any matter causing or contributing to such pollution, together with a notice specifying a reasonable time (not less than six months) to secure abatement of such

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pollution, and shall also send such findings and recommendations and such notice to the State water pollution control agency and to the interstate agency, if any, of the State or States where such discharge or discharges originate.

(2) *In connection with any hearing called under this section the Secretary is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution to file with him, in such form as he may prescribe, a report based on existing data, furnishing such information as may reasonably be required as to*

*the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. Such report shall be made under oath or otherwise, as the Secretary may prescribe, and shall be filed with the Secretary within such reasonable period as the Secretary may prescribe, unless additional time be granted by the Secretary. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.*

*(3) If any person required to file any report under paragraph (2) of this subsection shall fail to do so within the time fixed by the Secretary for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of \$100 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may upon application therefor remit or mitigate any forfeiture provided for under this paragraph and he shall have authority to determine the facts upon all such applications.*

*(4) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.*

*(g) If action reasonably calculated to secure abatement of the pollution within the time specified in the notice following the public hearing is not taken the Secretary—*

*(1) in the case of pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (causing or contributing to such pollution) originate, may request the Attorney General to bring a suit on behalf of the United States to secure abatement of pollution, and*

*(2) in the case of pollution of waters which is endangering the health or welfare of persons only in the State in which the discharge or discharges (causing or contributing to such pollution) originate, may, with the written consent of the Governor of such State, request the Attorney General to bring a suit on behalf of the United States to secure abatement of the pollution.*

*(h) The court shall receive in evidence in any such suit a transcript of the proceedings before the Board and a copy of the Board's recommendations and shall receive such further evidence as the court in its discretion deems proper. The court, giving due consideration*

to the practicability and to the physical and economic feasibility of securing abatement of any pollution proved, shall have jurisdiction to enter

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such judgment, and orders enforcing such judgment, as the public interest and the equities of the case may require.

(i) Members of any Hearing Board appointed pursuant to subsection (f) who are not regular full-time officers or employees of the United States shall, while participating in the hearing conducted by such Board or otherwise engaged on the work of such Board, be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(j) As used in this section the term—

(1) “person” includes an individual, corporation, partnership, association, State, municipality, and political subdivision of a State, and

(2) “municipality” means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law.

#### COOPERATION TO CONTROL POLLUTION FROM FEDERAL INSTALLATIONS

SEC. 11. It is hereby declared to be the intent of the Congress that any Federal department or agency having jurisdiction over any building, installation, or other property shall, insofar as practicable and consistent with the interests of the United States and within any available appropriations, cooperate with the Department of Health, Education, and Welfare, and with any State or interstate agency or municipality having jurisdiction over waters into which any matter is discharged from such property, in preventing or controlling the pollution of such waters. In his summary of any conference pursuant to section 10(d)(3) of this Act, the Secretary shall include references to any discharges allegedly contributing to pollution from any Federal property. Notice of any hearing pursuant to section 10(f) involving any pollution alleged to be effected by any such discharges shall also be given to the Federal agency having jurisdiction over the property involved and the findings and recommendations of the Hearing Board conducting such hearing shall also include references to any such discharges which are contributing to the pollution found by such Hearing Board.

## ADMINISTRATION

SEC. 12. (a) The Secretary is authorized to prescribe such regulations as are necessary to carry out his functions under this Act.

(b) The Secretary, with the consent of the head of any other agency of the United States, may utilize such officers and employees of such agency as may be found necessary to assist in carrying out the purposes of this Act.

(c) There are hereby authorized to be appropriated to the Department of Health, Education, and Welfare such sums as may be necessary to enable it to carry out its functions under this Act.

(d) Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or under-

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taking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

(e) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act.

## DEFINITIONS

SEC. 13. When used in this Act:

(a) The term "State water pollution control agency" means the State health authority, except that, in the case of any State in which there is a single State agency, other than the State health authority, charged with responsibility for enforcing State laws relating to the abatement of water pollution, it means such other State agency.

(b) The term "interstate agency" means an agency of two or more States established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution of waters.

(c) The term "treatment works" means the various devices used in the treatment of sewage or industrial wastes of a liquid nature, including the necessary intercepting sewers, outfall sewers, pumping, power, and other equipment, and their appurtenances, and includes any extensions, improvements, remodeling, additions, and alterations thereof.

(d) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, and Guam.

(e) The term "interstate waters" means all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters.

(f) The term "municipality" means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes[.], and an Indian tribe or an authorized Indian tribal organization.

#### OTHER AUTHORITY NOT AFFECTED

SEC. 14. This Act shall not be construed as (1) superseding or limiting the functions, under any other law, of the Surgeon General or of the Public Health Service, or of any officer or agency of the United States, relating to water pollution, or (2) affecting or impairing the provisions of the Oil Pollution Act, 1924, or sections 13 through 17 of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors and for other purposes", approved March 3, 1899, as amended, or (3) affecting or impairing the provisions of any treaty of the United States.

#### SEPARABILITY

SEC. 15. If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid,

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the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

#### SHORT TITLE

SEC. 16. This Act may be cited as the "Federal Water Pollution Control Act".

### TITLE II—CLEAN RIVERS RESTORATION PROGRAM

#### STATEMENT OF PURPOSE

Sec. 201. *It is the purpose of this title to accelerate pollution control and abatement programs through the preparation and development of basin pollution control and abatement plans and through the establishment of additional incentives to encourage waste treatment consistent with water quality standards.*

## SUBMISSION OF PLAN

*Sec. 202. In the case of intrastate waters, whenever the Governor of the State wherein such waters are located develops a basin pollution control and abatement plan, he is authorized to submit such plan for approval by the Secretary and Congress in accordance with this title. In the case of interstate waters, whenever not less than 50 per centum of the Governors of the States wherein such waters are located develop a basin pollution control and abatement plan, they are authorized to submit such plan for approval by the Secretary and Congress in accordance with this title. In the case of interstate waters, whenever an interstate agency develops a basin pollution control and abatement plan for waters under its jurisdiction, such agency is authorized to submit such plan for approval by the Secretary and Congress in accordance with this title. Notwithstanding any other provision of this section, in the event that the Upper Colorado River Basin is involved, the Governors of at least three of the four States of Colorado, New Mexico, Utah, and Wyoming or, in the event the Columbia River Basin is involved, the Governors of at least three of the four States of Idaho, Montana, Oregon, and Washington, must develop, or concur in the development of, a basin pollution control and abatement plan, including any such basin plan developed by an interstate agency.*

## REVIEW OF PLAN

*Sec. 203. (a) Upon submission of a proposed basin pollution control and abatement plan to the Secretary, he shall transmit such plan to the Secretary of Housing and Urban Development, the Water Resources Council, and, when appropriate, the Secretary of State for review. Within sixty days of transmission of such plan, such officers and the Council shall notify the Secretary of their views, comments, and recommendations with respect to such plan.*

*(b) The Secretary shall review the proposed basin pollution control and abatement plan together with the views, comments, and recommendations received pursuant to subsection (a) of this section and, if he determines that the plan will adequately and effectively maintain the waters covered by the plan at the level of quality established by the applicable water quality standards for those waters, he shall approve the plan.*

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## CONGRESSIONAL APPROVAL

*Sec. 204. After the Secretary approves a basin pollution control and abatement plan in accordance with section 203 of this title, he shall transmit such plan together with all views, comments, and*

*recommendations received from any department, agency, or instrumentality of the Federal Government to Congress for approval of such plan by Congress by a specific statute of approval.*

#### GRANT PROGRAM FOR TREATMENT WORKS

*Sec. 205. Whenever a basin pollution control and abatement plan is approved by Congress in accordance with this title, the Secretary is authorized to make grants to States, municipalities, and interstate agencies from funds appropriated and allocated under authority of section 8 of this Act to assist in financing the construction of treatment works within such basin subject to the following limitations:*

*(1) the amount of any grant approved by the Secretary shall not exceed 40 per centum of the estimated reasonable construction costs of such treatment works, except that the percentage limitation of 40 per centum imposed by this clause shall be increased to 50 per centum in the case of grants made under this section from funds allocated for a fiscal year to a State under section 8(c) of this Act if the State agrees to pay not less than 25 per centum of the estimated reasonable costs (as determined by the Secretary) of all projects for which Federal grants are to be made under this section from such allocation;*

*(2) no grant shall be made to assist in financing any such works which are receiving a Federal grant under any other provision of law, and no Federal grant shall be made under any other provision of law to assist in financing any treatment works for which a grant has been made under this title, except a supplementary grant under section 214 of the Appalachian Regional Development Act of 1965 or a supplementary grant under section 101 of the Public Works and Economic Development Act of 1965;*

*(3) no grant shall be made unless such works have been approved by the appropriate State water pollution control agency or agencies and have been certified by such agency or agencies as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs.*

#### APPROVAL OF GRANTS FROM OTHER AGENCIES

*Sec. 206. After Congress approves a basin pollution control and abatement plan, application for a grant to assist in financing the construction of treatment works in such basin made under any other provision of law shall not be approved by the head of any other Federal agency, by the Appalachian Regional Commission, or any other regional commission established under authority of the Public Works and Economic Development Act of 1965 unless, in the judgment of*

*the Secretary, such works substantially conform to such basin plan.*

#### ADMINISTRATIVE EXPENSES

*Sec. 207. The Secretary is authorized to make a grant to pay not to exceed 50 per centum of the administrative expenses of a designated planning agency in preparing a basin pollution control and abatement plan*

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*for submission for approval under this title. Only a planning agency designated as follows shall be eligible for such a grant:*

*(1) in the case of intrastate waters, the Governor may designate an agency of State government as the planning agency;*

*(2) in the case of interstate waters, not less than 50 per centum of the Governors of the States in which such waters are located may designate either agencies of the governments of such States, or an interstate agency.*

#### USE OF FEDERAL EMPLOYEES

*Sec. 208. The head of each department, agency, and instrumentality of the Federal Government is authorized to detail employees of such department, agency, or instrumentality to assist any State or interstate agency in the preparation of a basin pollution control and abatement plan for submission and approval under this title, upon a request from such State or interstate agency for such assistance.*

#### SPECIFIC DESIGNATIONS AND APPROVAL

*Sec. 209. Notwithstanding any other provision of this title, the Tennessee Valley Authority is designated as the planning agency for the Tennessee River Basin, and the Delaware River Basin Commission created by the Delaware River Basin compact is designated as the planning agency for the Delaware River Basin as defined for the purposes of such compact. Upon development of a basin pollution control and abatement plan (1) by such Authority and approval of such plan by the Board of Directors of such Authority or (2) by such Commission and approval by such Commission, such plan shall be a basin pollution control and abatement plan which shall be transmitted directly by such Authority or such Commission to Congress for approval in accordance with this title.*

#### LABOR STANDARDS

*Sec. 210. The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on projects for which grants are made under section 205 shall be paid wages at rates not less than those prevailing for the*



same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C. 276a—276a-5). The Secretary of Labor shall have, with respect to the labor standards specified in this section, the authority and functions set forth in Reorganization Plan Numbered 14, 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15), and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c).

#### DEFINITIONS

Sec. 211. For the purposes of this title—

(1) the term “basin” includes, but is not limited to, rivers and their tributaries, streams, coastal waters, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby.

(2) the term “construction” shall have the same meaning as it has in section 8 of this Act.

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#### SECTIONS 2 AND 7 OF THE OIL POLLUTION ACT, 1924

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SEC. 2. When used in this Act, unless the context otherwise requires—

(a) The term “oil” means oil of any kind or in any form, including fuel oil, oil sludge, and oil refuse;

(b) The term “person” means an individual, partnership, corporation, or association; any owner, master, officer or employee of a vessel; and any officer, agent, or employee of the United States;

(c) The term “coastal navigable waters of the United States” means all portions of the sea within the territorial jurisdiction of the United States, and all inland waters navigable in fact in which the tide ebbs and flows;

(d) The term “Secretary” means the [Secretary of War] *Secretary of the Interior*.

\* \* \* \* \*

[SEC. 7. That in the administration of this Act the Secretary may make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel, employed under his direction in the improvement of rivers and harbors, and in the enforcement of existing laws for the preservation and protection of navigable waters. And for the better enforcement of the provisions of this Act, the officers and agents of the United States in charge of river and harbor improvements, and the assistant engineers and inspectors employed under them by authority of the Secretary, and officers of the Customs and Coast Guard Service of the United States, shall have

power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of said provisions: *Provided*, That no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid officials: *And provided further*, That whenever any arrest is made under the provisions of this Act the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him; and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.]

*Sec. 7. In the administration of this Act, the Secretary may make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel employed by him or the Secretary of the Army for the preservation and protection of navigable waters. For the better enforcement of the provisions of this Act, the offices and agencies of the United States in charge of river and harbor improvements and the assistant engineers and inspectors employed under them by authority of the Secretary of the Army, and persons employed by the Secretary, and officers of the Customs and Coast Guard of the United States, shall have power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of such provisions, except that no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid officials. Whenever any arrest is made under the provisions of the said sections the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the*

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*offenses alleged against him; and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.*

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For the information of the Members of the House, the following reorganization plan is set forth below:

#### REORGANIZATION PLAN NO. 2 OF 1966

PREPARED BY THE PRESIDENT AND TRANSMITTED TO THE SENATE AND THE HOUSE OF REPRESENTATIVES IN CONGRESS ASSEMBLED, FEBRUARY 28, 1966, PURSUANT TO THE PROVISIONS OF THE REORGANIZATION ACT OF 1949, 63 STAT. 203, AS AMENDED

#### WATER POLLUTION CONTROL

SECTION 1. TRANSFERS OF FUNCTIONS AND AGENCIES.—(a) Except

as otherwise provided in this section, all functions of the Secretary of Health, Education, and Welfare and of the Department of Health, Education, and Welfare under the Federal Water Pollution Control Act, as amended, hereinafter referred to as the Act (33 U.S.C. 466 et seq.), including all functions of other officers, or of employees or agencies, of that Department under the Act, are hereby transferred to the Secretary of the Interior.

(b) The Federal Water Pollution Control Administration is hereby transferred to the Department of the Interior.

(c) (1) The Water Pollution Control Advisory Board, together with its functions, is hereby transferred to the Department of the Interior.

(2) The functions of the Secretary of Health, Education, and Welfare (including those of his designee) under section 9 of the Act shall be deemed to be hereby transferred to the Secretary of the Interior.

(3) The Secretary of Health, Education, and Welfare shall be an additional member of the said Board as provided for by section 9 of the Act and as modified by this reorganization plan.

(d) (1) The Hearing Boards provided for in sections 10(c) (4) and 10(f) of the Act, including any Boards so provided for which may be in existence on the effective date of this reorganization plan, together with their respective functions, are hereby transferred to the Department of the Interior.

(2) The functions of the Secretary of Health, Education, and Welfare under the said sections 10(c) (4) and 10(f) shall be deemed to be hereby transferred to the Secretary of the Interior.

(3) The Secretary of the Interior shall give the Secretary of Health, Education, and Welfare opportunity to select a member of each Hearing Board appointed pursuant to sections 10(c) (4) and 10(f) of the Act as modified by this reorganization plan.

(e) There are excepted from the transfers effected by subsection (a) of this section (1) the functions of the Secretary of Health, Education, and Welfare and the Assistant Secretary of Health, Education, and Welfare under clause (2) of the second sentence of section 1(b) of the Act, and (2) so much of the functions of the Secretary of Health, Education, and Welfare under section 3(b) (2) of the Act as relates to public health aspects.

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(f) The functions of the Surgeon General under section 2(k) of the Water Quality Act of 1965 (79 Stat. 905) are transferred to the Secretary of Health, Education, and Welfare. Within 90 days after this reorganization plan becomes effective, the Secretary of the Interior and the Secretary of Health, Education, and Welfare shall present to

the President for his approval an interdepartmental agreement providing in detail for the implementation of the consultations provided for by said section 2(k). Such interdepartmental agreement may be modified from time to time by the two Secretaries with the approval of the President.

(g) The functions of the Secretary of Health, Education, and Welfare under sections 2(b), (c), and (g) of the Water Quality Act of 1965 are hereby transferred to the Secretary of the Interior: *Provided*, That the Secretary of the Interior may exercise the authority to provide further periods for the transfer to classified positions in the Federal Water Pollution Control Administration to commissioned officers of the Public Health Service under said section 2(b) only with the concurrence of the Secretary of Health, Education, and Welfare.

(h) The functions of the Secretary of Health, Education, and Welfare under the following provisions of law are hereby transferred to the Secretary of the Interior:

(1) Section 702(a) of the Housing and Urban Development Act of 1965 (79 Stat. 490).

(2) Section 212 of the Appalachian Regional Development Act of 1965 (79 Stat. 16).

(3) Section 106 of the Public Works and Economic Development Act of 1965 (79 Stat. 554).

**SEC. 2. ASSISTANT SECRETARY OF THE INTERIOR.**—There shall be in the Department of the Interior one additional Assistant Secretary of the Interior, who shall be appointed by the President, by and with the advice and consent of the Senate, who shall, except as the Secretary of the Interior may direct otherwise, assist the Secretary in the discharge of the functions transferred to him hereunder, who shall perform such other duties as the Secretary shall from time to time prescribe, and who shall receive compensation at the rate now or hereafter prescribed by law for Assistant Secretaries of the Interior.

**SEC. 3. PERFORMANCE OF TRANSFERRED FUNCTIONS.**—The provisions of sections 2 and 5 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262) shall be applicable to the functions transferred hereunder to the Secretary of the Interior to the same extent as they are applicable to the functions transferred to the Secretary thereunder.

**SEC. 4. INCIDENTAL PROVISIONS.**—(a) So much of the personnel, property, records, and unexpended balances of appropriations, allocations, and other funds, employed, used, held, available, or to be made available in connection with the functions transferred to the Secretary of the Interior or the Department of the Interior by this reorganization plan as the Director of the Bureau of the Budget shall determine shall be transferred to the Department of the Interior at such time or times as the Director shall direct.

(b) Such further measures and dispositions as the Director of the Bureau of the Budget shall deem to be necessary in order to effectuate the transfers referred to in subsection (a) of this section shall be carried out in such manner as he shall direct and by such agencies as he shall designate.

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(c) This reorganization plan shall not impair the transfer rights and benefits of commissioned officers of the Public Health Service provided by section 2 of the Water Quality Act of 1965.

**SEC. 5. ABOLITION OF OFFICE.**—(a) There is hereby abolished that office of Assistant Secretary of Health, Education, and Welfare the incumbent of which is on date of the transmittal of this reorganization plan to the Congress the Assistant Secretary of Health, Education, and Welfare designated by the Secretary of Health, Education, and Welfare under the provisions of section 1(b) of the Act.

(b) The Secretary of Health, Education, and Welfare shall make such provisions as he shall deem to be necessary respecting the winding up of any outstanding affairs of the Assistant Secretary whose office is abolished by subsection (a) of this section.

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#### SUPPLEMENTARY VIEWS

While supporting the provisions of H.R. 16076 as reported by the House Committee on Public Works, we feel that, even with the appreciable improvements it offers, it does not go far enough. It is clear that a sustained and truly massive attack upon pollution is overdue.

Admittedly the bill represents a very substantial increase in the grant programs presently available. Still, it falls embarrassingly short of the goals established in the bill as passed unanimously by the Senate. We can find no reason to regard the Senate bill as excessive when compared with the enormity and critical urgency of the problem.

The House committee bill provides a total of \$2.3 billion in new authorizations for a 4-year period, or an average of \$575 million annually. The Senate passed measure, by comparison, would provide a total of \$6 billion for a 6-year period including the current fiscal year, or an average of \$1 billion annually. Comparative annual authorizations are shown in the following chart.

## CONSTRUCTION GRANT AUTHORIZATIONS

Fiscal year ending June 30—	Senate bill (as passed on July 14, 1966)	House com- mittee bill
1967 <sup>1</sup> .....	<sup>1</sup> \$150,000,000	<sup>1</sup> \$150,000,000
1968 .....	600,000,000	300,000,000
1969 .....	1,000,000,000	400,000,000
1970 .....	1,250,000,000	650,000,000
1971 .....	1,500,000,000	950,000,000
1972 .....	1,500,000,000	.....
Totals .....	6,000,000,000	2,450,000,000

<sup>1</sup> \$150,000,000 already authorized by existing law for fiscal 1967.

For the 4 years of fiscal 1968 through fiscal 1971, the Senate-approved program would furnish almost twice as much financial ammunition in the war against pollution as the House committee bill offers.

The amount contained in the Senate bill is, to be sure, a great deal of money, but we believe it is fully warranted. Its cost averages only about \$5 a year per citizen, or 42 cents a month—little more than the price for a package of cigarettes or a gallon of gas or a can of beer—for clean water, the one commodity without which no citizen can live. We do not believe that this is too much.

Assuring the adequacy and purity of the Nation's water supply is the single most crucial domestic problem confronting the United States in our time. It warrants an all-out crash program. Half-way measures will no longer suffice. The pollution of our waters is rapidly reaching crisis proportions. It can only get worse unless we move with vision and boldness and match the amplitude of our words with the rectitude of our deeds.

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The waters of America are severely, some of them very dangerously, infected. No region of the country is immune, and no major American stream today remains undefiled. In spite of our best efforts to date, the problem has grown faster than our solutions.

Our Great Lakes are decaying, glutted with human and industrial filth, developing at their central cores vast liquid "deserts" (in the case of Lake Erie, 2,600 square miles) so sapped of oxygen that aquatic life is doomed. Merely to clean up the Great Lakes and restore their purity will require many years of intensified effort and an estimated \$20 billion for this task alone.

Last year, when the hot hand of drought closed a sweaty fist upon our northeastern seaboard, many communities could have been spared the privations of restrictive water rationing if their streams had been

usable. The broad Hudson River, flowing uselessly through the heart of New York City, could have eradicated that city's critical water deficit entirely, had its waters been fit for consumption. But it was too foul to drink and too thick to purify. Four little children ate a watermelon fished from the Hudson and died.

One cupful of water taken at random from the Connecticut River near Hartford was found to contain 26 different infectious bacteria, including typhoid, paratyphoid, cholera, tuberculosis, tetanus, and all the known viruses including polio.

The oysterbeds of Chesapeake Bay produce only about one-tenth their former harvest because of increasing contamination. Shellfish from contaminated beds are the most notorious carriers of hepatitis. Dead fish killed by the poisoning of our rivers numbered more than 100,000 in each of at least 5 different locations throughout our country last year.

Hardly any American river—except in a few sparsely settled areas—is free of putrefaction of some type.

Even underground water tables are subject to pollution. An epidemic in Riverside, Calif., last summer afflicted 18,000 citizens and claimed a number of lives before bacteriologists traced the source to the city's water supply, which for 75 years had been safe and pure since it comes from 30 deep wells. Suddenly, due to a subterranean contamination, death and debilitating disease lurked in the water taps of the city.

No less than 20 billion gallons of water every day are being spoiled and wasted in the United States because of pollution. This is ravaged water that otherwise could be used and reused. This 20 billion gallons represents fully one-fourth of our total *pure* water needs, when the amounts required daily by irrigation, industry, and power generation are deducted. Its loss affects the lives, the economy, the health and the pleasure of far more than half of our population.

When compared with present authorization levels, the House committee bill represents truly substantial progress. When compared with the demonstrated need confronting the United States, however, it seems less impressive.

The amounts of funding necessary from all sources to cure the menace of pollution by 1972 range variously upward to as much as \$100 billion. Against these figures, we do not believe that the \$6 billion as recommended in the Senate bill is in any sense excessive.

Others have estimated that, merely to stand still—merely to keep

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pace with the ever-increasing flow of waste poured into our streams by the growth of our cities and the proliferation of our industries—

merely to avoid an *increase* in the degree of contamination which already afflicts our streams—a sum of at least \$20 billion would be required between now and 1972. And we do not believe that simply maintaining the *status quo* is sufficient.

It is not as though we had no proven means of attacking the problem. The water pollution control program was launched a full decade ago. Essentially, it was the creation of the House and of the House Public Works Committee. The construction grant approach was conceived and sponsored by Representatives John A. Blatnik and Robert E. Jones, who have made truly significant contributions in this field.

During the first 8 years of this national program, it directly encouraged the building of 5,994 modern purification plants in communities throughout the country. Approximately \$500 million in Federal grants had stimulated local investments of more than \$3 billion in water purity. So the basic construction grant philosophy is no longer experimental. We *know* it works. It remains now for Congress to expand the program sufficiently to cope with the monumental size of the problem.

Over the years the program has been refined and improved. Individual grant ceilings have been raised to provide meaningful assistance to our larger communities, the principal sources of pollution. Initially, no project could qualify for a grant of more than \$600,000. Under the legislation presently offered, an individual project in which two or more communities may cooperate may receive as much as \$9.6 million in assistance. But this very fact, reducing the *number* of projects which may be assisted with a given amount of money, makes it all the more imperative that the total available authorization be increased accordingly.

We are in no sense unmindful of the budgetary situation confronting our country nor of the concern over inflation which presently preoccupies many in both the legislative and executive branches of our Government. Yet inflationary and recessionary fluctuations, admittedly disturbing, are and have been essentially transitory in character. They wax and wane. The water pollution problem, however, has been many years in the making and will be increasingly with us, come high prices or low, until we summon the determination to assault it boldly on all fronts.

Whatever the vicissitudes of the price index, the long-range need in this country will be for continued economic growth to feed and employ our rapidly growing population. And nothing can so retard economic growth as a lack of usable water. Ultimately, we shall be forced to face this problem in its full and awesome dimensions. The longer we put it off, the greater the final cost will be.



Certainly the American public will applaud and support an even bolder program than is encompassed in the House committee bill. However, they may feel about certain other expenditures, the American people are willing to pay whatever it costs for clean, pure water. It is significant, we think, that the Senate adopted the higher figures by a unanimous vote of 90-0. For a domestic financial authorization in this range, such unanimity is almost without precedent. It be-

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speaks, in our opinion, a readiness and even an anxiety on the part of the public at large to get on with the job in the most expeditious way possible.

What could be more important?

No other domestic program of our Government, however praiseworthy, can so profoundly or so personally affect the lives of so many Americans. Poverty programs help one economic strata of our people. Crop support programs assist one segment of the economy. Civil rights bills aid certain ethnic groups. Regional programs, such as Appalachia, the Great Plains, and the Tennessee Valley, touch only geographic slices of America. The area redevelopment approach reaches scattered pockets throughout the land. The purity of our water, on the other hand, affects *every* American, his children, and his grandchildren.

The House committee bill is a good one. We simply believe that a level of authorizations nearer to the Senate-approved figures would make it even better.

JIM WRIGHT.

KENNETH J. GRAY.

ED EDMONDSON.

RICHARD D. MCCARTHY.

JOHN R. SCHMIDHAUSER.

ROBERT E. SWEENEY.

JAMES J. HOWARD.

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#### ADDITIONAL VIEWS ON H.R. 16076

We support H.R. 16076, as reported by the Committee on Public Works, for we believe that it is a constructive step toward alleviating the deplorable conditions of pollution which plague our Nation's waters. However, we are constrained to bring to the attention of the Members of the House certain matters relating to the bill which, in

our opinion, are not dealt with adequately in the preceding report of the committee.

**"CLEAN RIVERS RESTORATION PROGRAM"—A MISNOMER**

Title I of the reported bill amends the Federal Water Pollution Control Act by adding thereto a new title II, entitled "Clean Rivers Restoration Program." The stated purpose of this title is to accelerate pollution control and abatement programs through the preparation and development of basin pollution control and abatement plans and through the establishment of additional incentives to encourage waste treatment consistent with water quality standards.

The "clean rivers" label for legislation was used this year by President Johnson in his message "Preserving Our Natural Heritage," which was submitted to Congress on February 23, 1966, and printed as House Document No. 387, 89th Congress, 2d session. In this message, the President proposed a clean rivers demonstration program as a beginning "to clean and preserve entire river basins from their sources to their mouths." Two days later, on February 25, the Secretary of Interior submitted recommended legislation to the Congress to carry out the President's proposal, title I of which is entitled "Clean Rivers Restoration Act of 1966." This recommended legislation, by its own language, is limited in application to selected river basins. However, when testifying before the committee, Secretary Udall said this title was actually intended to apply to all cities and communities wherever situated, whether in a river basin or not. His testimony, and that of other witnesses, clearly disclosed that the proposed Clean Rivers Restoration Act of 1966, aside from providing for basin planning, is nothing more than an expansion of the existing Federal program of grants for construction of municipal sewage treatment plants.

The clean rivers restoration program in title I of the reported bill is a vast improvement over the administration's proposal, but, like the administration's Clean Rivers Restoration Act of 1966, it is not going to clean up the rivers of the Nation. It does not provide grants for the construction of industrial waste treatment facilities, or for the prevention or control of agricultural pollution from surface runoff carrying pesticide and fertilizer chemicals, or for the removal of sludge and filth which rests on the bottoms and banks of long-polluted rivers, or for the supplementary treatment of waters where residual problems of quality occur even where municipalities and industries have constructed treatment works. The clean rivers restoration

program in H.R. 16076, as reported, which label the administration insisted upon retaining, does promote the concept of basin planning, but the provisions for actually combating pollution are merely another program of grants for construction of municipal sewage treatment works, which is in addition to the existing grant program for the same purpose.

We support this new program because it provides incentives for basin planning. But we want to make it abundantly clear that, notwithstanding the implication of its title, the clean rivers restoration program will not result in clean, sparkling rivers throughout the country. Our waters are being polluted from many sources unrelated to municipal sewage, and grants for the treatment of municipal sewage meet only one part of the much broader pollution problem. Any cleaning up of the rivers of the Nation unrelated to the treatment of municipal sewage, resulting from Federal law, will be because of the pollution abatement enforcement provision and requirements for water quality standards in existing law and not because of the "clean rivers" title of this bill.

Publicity given to the administration's proposed clean rivers program has so distorted its limited application and effectiveness as to flagrantly mislead the Congress and the American people into believing that it will accomplish miraculous results never intended and admittedly beyond its reach. We want to correct this misconception here and now.

The committee, however, has laid the foundation for possible future legislation to ultimately provide for more comprehensive pollution control and abatement. The committee accepted an amendment offered by Congressman Don Clausen, which is section 211 of the bill, to direct the Secretary of the Interior to conduct a full and complete investigation and study of methods for providing incentives to assist in the construction of facilities and works by industry to reduce or abate water pollution. This study shall include, but not be limited to, the possible use of tax incentives as well as other methods of financial assistance. The reported bill also provides for 70 percent Federal grants for research and demonstration projects for prevention of pollution of waters by industry. Both of these provisions are highly desirable, and they may point the way to a future solution of the pollution problems created by industry. But it should be clearly understood that the "clean rivers" title of the reported bill does not provide any action program for the treatment of industrial waste that is not discharged into a municipal sewer system and treated in a municipal sewage treatment works. This, of course, excludes the thousands of industrial plants, including many of the largest ones, which are located along the rivers and other waters of the country

and which may discharge untreated or only partially treated waste directly into such waters, as well as use the water in their manufacturing processes.

The "clean rivers" title makes no attempt to establish an action program of Federal assistance to combat pollution caused by surface runoff from agricultural and other lands. Controlling water quality in agricultural areas without hindering agricultural production, which production must necessarily increase in the future to meet the growing needs of our expanding population, is a complex and important matter. The Secretary is urged to give this problem high priority under his existing study and research authority.

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The mislabeling of title I of the reported bill, as the "clean rivers restoration program," is unfortunate, for it is obvious that the grant provisions of this legislation are not going to result in clean rivers. Title I is a forward step in the war on pollution, which we fully support. We hope that its misleading title will not result in such disappointment from its results as to undermine public confidence in the entire Federal water pollution control program.

#### INCREASES IN AUTHORIZATION FOR CONSTRUCTION GRANTS

One of the most troublesome aspects in the consideration of this legislation was determining the amount of money to be authorized for the purpose of making Federal grants to aid in the construction of sewage treatment works. This problem arose primarily from the wide discrepancy between the various proposals before the committee, and the absence of accurate and reliable information to support any of the proposals.

The original administration proposal would have added nothing to the amounts already authorized for the present construction grant program, but would have provided an additional \$50 million for fiscal year 1967 and unlimited amounts thereafter for the proposed clean rivers program.

The Senate-passed bill (S. 2947) would authorize \$6 billion for fiscal years 1967 to 1972, inclusive, for the two grant programs for construction of sewage treatment works.

A revised administration proposal submitted after the Senate had passed S. 2947 would authorize the appropriation of \$3.45 billion for fiscal years 1967 to 1972, inclusive.

The committee was generally agreed that some acceleration in the Federal grant program is needed. The question was as to the degree of acceleration. We certainly feel that we should not undertake a crash program without better evidence of actual needs than we now have.

The compromise agreed to by the committee was to authorize the annual amounts recommended in the revised administration proposal, but only through fiscal year 1971. In our opinion, this is the absolute maximum which can be justified. Under this compromise, the amount authorized for fiscal year 1968 is exactly double that authorized for 1967, the amount for 1969 is  $2\frac{1}{2}$  times the 1967 level, the 1970 authorization is  $4\frac{1}{3}$  times the 1967 level, and the authorization for 1971 is  $6\frac{1}{3}$  times the 1967 level.

This is acceleration with a vengeance.

We could not have agreed to such a huge increase in the size of this program at this time had not the increase been coupled with additional inducements to the States to join the effort to clean up our valuable waterways, rather than leaving the task to Federal and local authorities.

Since 1959, the minority has asserted the position that there needed to be greater State financial participation in the construction of sewage treatment works. In 1961, the minority even more strongly asserted this position, and in the minority views on the legislation then pending before the Congress, the 1961 amendments to the Federal Water Pollution Control Act, as amended, it spelled them out in explicit terms, as follows:

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We believe that, rather than compounding the increasing decline in construction of treatment works independent of Federal subsidy which will result from a mere doubling of the amount of funds authorized to be appropriated for Federal grants, as now provided in H.R. 6441, if there is to be any increase in the amount of funds appropriated for Federal grants it should be directed toward providing an effective incentive to accelerate needed construction by offering an inducement to the States to respond to their responsibilities and participate in the cost of treatment plants.

This can be accomplished, without reducing the level of the present construction grant program under existing law, by requiring that State funds match any sums authorized to be appropriated, by H.R. 6441, which are in excess of the \$50 million annual authorization provided in existing law. If enlargement of the Federal grant program to construct local sewage treatment works is inescapable, then it is high time that the States face up to their responsibilities and assist in defraying the costs of such facilities.

After 6 long years of advocacy by the minority of greater State financial participation in the construction of sewage treatment works,

the Water Quality Act of 1965 (Public Law 89-234) provided incentives to the States to participate, but only with respect to a part of the funds authorized for fiscal years 1966 and 1967. H.R. 16076, as reported by the committee, contains substantial inducements to the States to participate in the cost of projects under both the accelerated existing program and the proposed new clean rivers program. This will not only bring the States more actively into the program, as we have urged so long, but will also reduce the need for future Federal and local funds by the amount of the States' contributions.

In determining the degree of acceleration of the Federal grant program, we must consider the ability of the States and communities to utilize the Federal funds made available. It will take time for the States and communities to "tool up" for a program which would be doubled in the first year and increased to over six times the present level in just 4 years. Preparation of plans, and making arrangements to finance the State and local shares of the cost of projects will take a great deal of time. Furthermore, the availability of materials and qualified contractors and the ability of States and local governments to sell bonds at acceptable interest rates may be controlling factors. During the hearings, the committee heard that at least one State (Vermont) has no backlog of unfinanced sewage treatment plants, in the sense of need for Federal money. Mr. Reinhold W. Thieme, member of the executive committee of the Interstate Conference on Water Problems, and commissioner on water resources in Vermont, testified with respect to his State:

Our program at the present time is about all that we could support either financially or through the capabilities of contractors that have been dealing with these services. In fact, we have had some where we have not been able to get bids because the contractors were all busy.

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While this situation may not exist in many or even any other States, it illustrates the fact that we cannot solve the problem by simply pouring out floods of Federal money. The amounts to be made available for Federal grants must bear some relationship to the ability of the States and local communities to utilize such grants. We believe that the amounts which would be authorized by H.R. 16076 are the absolute maximum which could be wisely used, and may exceed the ability of many of the States.

It is our belief that those who advocate increased authorizations to the level of a crash program are guided by their emotions more than by facts and evidence as to the actual needs, and are perhaps overlooking other Federal programs which provide assistance in the construc-

tion of sewage treatment works. The following programs must be considered:

*Public Works and Economic Development Act of 1965.*—Under this act, Federal grants up to 50 percent of the total cost and loans up to 100 percent of the total cost are available for “the acquisition of land and improvements for public works, public service, or development facility usage, and the acquisition, construction, rehabilitation, alteration, expansion, or improvement of such facilities, including related machinery and equipment” within redevelopment areas. Sewage treatment works can be and have been financed under this act.

In addition to this, section 101 of the act authorizes supplementary grants for the purpose of increasing the Federal contribution up to 80 percent of the cost of projects constructed under other Federal grant-in-aid programs, including sewage treatment works financed under the Federal Water Pollution Act.

Under the act, specific amounts are not set aside for sewage treatment plants, but a total of \$500 million is authorized for all grants and supplemental grants for the fiscal years 1966 to 1969, inclusive, and annual appropriations for making and participating in loans are authorized up to \$170 million for fiscal years 1966 to 1970, inclusive.

*Appalachian Regional Development Act of 1965.*—This act, Public Law 89-4, authorizes the Secretary of the Interior to make grants for the construction of sewage treatment works in the Appalachian region in accordance with the provisions of the Federal Water Pollution Control Act, as amended. The act authorizes a sum not to exceed \$6 million to be appropriated for the program.

In addition to this, section 214 of the act authorizes supplementary grants to increase the Federal contribution up to 80 percent of the cost of constructing projects under other Federal grant-in-aid programs, including sewage treatment works under the Federal Water Pollution Act. A total of \$90 million is available for making supplementary grants under section 214.

*Housing and Urban Development Act of 1965.*—The Housing and Urban Development Act of 1965, Public Law 89-117, provides for Federal grants of up to 50 percent of the total cost of the project to finance specific projects for basic public water facilities, including works for storage, treatment, purification, and distribution of water, and for basic public sewer facilities in areas with comprehensive planning as defined in the act. Such Federal grants may also be made for the advance purchase of land to be utilized for future construction of works thereon. The act authorized \$200 million per annum for each of the fiscal years 1966, 1967, 1968, and 1969, exclusively, for such purposes totaling another \$800 million from the Federal Treasury.

*Consolidated Farmers Home Administration Act, as amended.*—Under this act, as amended in 1965 (Public Law 89-240), the Secretary of Agriculture may make grants totaling up to \$50 million each fiscal year to finance “specific projects for the development, storage, treatment, purification, or distribution of water or the collection, treatment, or disposal of waste in rural areas.”

In addition to this, the act (as amended by Public Law 89-240) authorizes the Secretary to make or insure loans to finance, among other things the “conservation, development, use, and control of water, and the installation or improvement of drainage or waste disposal facilities” in rural areas.

As used in the act, the term “rural areas” does not include any area in any city or town which has a population more than 5,500 inhabitants, thus assuring that the financial assistance will go to those areas which are least likely to have adequate taxing authority, bonding capacity, or other financial resources.

*Public Facility Loans (42 U.S.C. 1491-1497).*—This program provides long-term construction loans to local public agencies for needed public works for which financing is not otherwise available on reasonable terms and conditions. Loans may be made to finance up to 100 percent of the project cost for a wide range of non-Federal public works, including sewage treatment works.

*Proposed Demonstration Cities Act of 1966.*—Title II of the Demonstration Cities Act of 1966, as reported by the House Committee on Banking and Currency, provides for Federal grants of up to 70 percent of the total costs for facilities within a metropolitan area as defined in the act and meeting all qualifications for metropolitan comprehensive planners set forth therein. Water pollution control and sewage treatment facilities are eligible for such assistance under the provisions of the bill, if enacted in its present form.

We have discussed these facts in an attempt to place this matter in proper perspective, and to consider the admittedly critical problem on a factual rather than an emotional basis.

We believe that the authorizations for construction grants contained in H.R. 16076 can be supported. We have no reliable evidence that the \$6 billion which would be authorized by S. 2947 as passed by the Senate is needed or can be fully used.

We feel very strongly that it would be a bad mistake to provide for an authorization of \$6 billion at this time. The question may be asked if there is admitted uncertainty in the exact amount, why not take the higher figure and leave it to the Committees on Appropriations to appropriate only the amounts actually needed. This might appear to make sense except for some overriding facts. For instance, the inherent danger which lies in the use of a figure far greater than the



amount we believe can be geared into the program at this time. The figure may actually be dangerous in the sense that it leads to a completely false sense of progress. The principal objective to be achieved now is to make the States, cities, and communities so conscious of the threat of water pollution that they will make every effort to produce maximum results in the way of increased planning and increased financial assistance. A figure of \$6 billion might easily be taken to mean that the Federal Government has solved the problem; that it has applied the dollar formula to achieve a panacea; that it has followed the Washington formula of applying dollars to

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solve the problem. The fact that the figure is an authorization and not an appropriation will be overlooked by most people. The fact that the actual appropriations may bear no resemblance to this figure will not mitigate this false sense of progress.

Instead of a bill which will urge States, cities, and communities to exert their utmost to accelerate the program, it may well have the exact opposite effect and make everybody think that the problem is well in hand. And all this because of a *sleight-of-hand reduction* of a mythological total cost of \$100 billion to an unsupported figure of \$20 billion for work to be accomplished in the immediate future which itself has no fixed time period, finally to arrive at an authorization total of \$6 billion determined by multiplying \$20 billion by an admittedly incorrect factor of 30 percent. The \$6 billion, in our opinion, is something less accurate than the computations used to put a man in orbit, and we had better wait for better figures before we delude the American public by this mirage.

WILLIAM C. CRAMER.  
JOHN C. KUNKEL.  
JAMES R. GROVER, Jr.  
DON H. CLAUSEN.  
CHARLES A. HALLECK.  
CHARLOTTE T. REID.  
ROBERT C. McEWEN.  
JAMES D. MARTIN.  
JOE SKUBITZ.

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**1.2j(2) SENATE COMMITTEE ON PUBLIC WORKS****S. REP. No. 1367, 89th Cong., 2d Sess. (1966)****FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS  
AND CLEAN RIVERS RESTORATION ACT OF 1966**

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JULY 11, 1966.—Ordered to be printed

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Mr. MUSKIE, from the Committee on Public Works, submitted the following

**R E P O R T**

[To accompany S. 2947]

The Committee on Public Works, to which was referred the bill (S. 2947) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

**P U R P O S E**

The purpose of S. 2947 is to—

(1) Establish the Clean Rivers Restoration Program as a supplement to the existing water pollution control program for planning and construction of treatment works on a river basin basis. This title will enable designation of planning agencies for each river basin or portion thereof in a State or States, at the request of the Governor or Governors, for the purpose of preparing detailed pollution control and abatement plans. After designation of a planning agency, the Secretary may make grants not to exceed 50 percent of a project's cost if (a) the Governor agrees to establish water quality standards for all rivers and streams in the State and (b) if the State provides 30 percent of the cost of each project.

(2) Eliminate existing dollar ceiling limitations on individual and joint sewage treatment construction project grants and provide a 30-percent grant for every approved project regardless of the total cost of any single or joint project.

(3) Provide a bonus of 10 percent of the total project cost for

any project which conforms with a comprehensive plan developed or in process of development for a metropolitan area.

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(4) Authorize a total of \$6 billion in appropriations for Federal sewage treatment construction grants through fiscal year 1972.

(5) Increase the authorization for appropriations for grants to States and interstate agencies for programs support from \$5 million to \$10 million annually for 5 years provided the States increase their share.

(6) Authorize appropriations of \$25 million annually for 5 years specifically for grants and contracts for research, development, and demonstration of advanced waste treatment and water purification methods and for development and demonstration of new or improved methods of joint treatment systems for municipal and industrial wastes.

(7) Provide for establishment of a revolving fund in the Treasury of the United States in order that the Secretary may make loans to appropriate local authorities for not more than the amount equal to the local required share for treatment works, interceptor sewers, and ancillary needs, provided such communities agree to pay the cost of maintaining and operating the facilities.

(8) Authorize the Secretary to apply to cases of international water pollution the enforcement procedures and authorities provided in the act for abating pollution situations wholly within the United States.

(9) Provide that the chairman of a conference shall afford an opportunity for any person contributing to or affected by alleged pollution to present a statement of his views to the conferees.

(10) Provide a mechanism whereby the Secretary may require submission of relevant information based on existing data on the part of any person whose alleged activities result in discharges which increase or contribute to water pollution or whose activities may affect the quality of waters involved in a conference.

(11) Provide that the Secretary shall, by January 10, 1968, submit to the Congress a comprehensive analysis of the national requirements for and cost of treating municipal, industrial, and other effluents, and other information.

(12) Amend the Refuse Act of 1899 to require consistency with the purposes of the Federal Water Pollution Control Act.

(13) Amend the Oil Pollution Act, 1924, to extend its application to navigable and interstate, as well as coastal waters, and the adjoining shorelines of the United States, and to extend applica-

tion of the prohibition on oil discharges from vessels to boats, shore installations and terminal facilities.

#### HEARINGS

Public hearings on S. 2947 were held by the committee on April 19, 20, 26, 27, 28, and May 5, 10, 11, and 12. Officials of the Department of Health, Education, and Welfare, the Department of the Interior, representatives of State and local governments, water pollution control agencies, conservation organizations, labor unions, industry, and other groups testified at these hearings or presented their views for the record. Significantly, 27 Members of the Senate, representing both political parties, either appeared or filed statements in support of a broadened Federal commitment to water pollution control and abatement.

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The need for an expanded water pollution control and abatement program as expressed by S. 2947 and its \$6 billion authorization was emphasized and reemphasized throughout the hearings. A number of other specific improvements in the Federal Water Pollution Control Act were recommended to the committee, some of which are embodied in S. 2947 as amended.

#### GENERAL STATEMENT

S. 2947 can be considered the first omnibus water pollution control act. It extends and broadens the existing program; it provides a new emphasis in the clean rivers concept; it strengthens other existing law, including the Oil Pollution Act of 1924 and it manifests the total commitment of the Federal Government to abatement of the pollution one of the Nation's most vital resources.

#### MAJOR PROVISIONS OF BILL

##### CLEAN RIVERS RESTORATION PROGRAM

The Clean Rivers Restoration Program as established in S. 2947 is a modification of title I of S. 2987, the administration's proposal. It is an expansion of the concepts developed by the Congress in the water quality standards provisions of the Water Quality Act of 1965. The committee, in authorizing a clean rivers program, has provided a method whereby necessary planning can be achieved in river basins or portions of river basins as part of a broader approach to pollution control.

The committee does not intend that the impetus created by the Water Quality Act be slowed by the use of river basin planning. The standard setting procedure established in 1965, while not progressing

as rapidly as it might due to the delay created by transfer of the Water Pollution Control Administration to the Department of the Interior, should not be altered or delayed by this act.

Under the clean rivers program, the Secretary is authorized to make 50-percent grants for construction of treatment works and sewer facilities within a designated river basin or portion thereof.

In return for the additional 20-percent Federal grant provided under the clean rivers program, the States must expand their commitment to effective pollution control. S. 2947 provides that the States must, among other things, in order to qualify projects for the 50-percent grant, provide 30 percent of the cost of each project within the designated river basin or portion thereof. The States must also give satisfactory assurance that enforceable water-quality standards either are in effect or will be established on all waters within the State.

The planning agency designated under the clean rivers program is expected to develop comprehensive pollution control and abatement plans which are consistent with water quality standards established pursuant to the Water Quality Act and provide the most effective and economic means of sewage treatment, including multimunicipal or municipal-industrial treatment works construction.

The plan, when appropriate, should demonstrate that treatment facilities proposed will provide for the improvement, as well as the maintenance, of water quality standards within the basin or portion

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thereof and should suggest meaningful ways to finance that share of project costs not covered by Federal and State grants.

The Secretary, in approving a proposed plan, should pay special attention to those recommendations within the plan as to the means developed for retiring the non-Federal-State share of the cost of each project. Sewer charges and metering systems may be effective methods to accomplish the above objective.

The committee reiterates its position that pollution must be effectively controlled and abated at the earliest possible date and that no unnecessary roadblocks should be placed in the way of construction of vitally needed treatment works and sewer systems.

#### GENERAL RESEARCH ACTIVITIES

The committee has amended the Water Pollution Control Act to provide for an accelerated research program. Sums authorized in 1961 are inadequate for an aggressive and imaginative research effort. New authorization of \$20 million for fiscal year 1968, \$25 million for 1969, and \$30 million for 1970 will permit funding to enable the Water

Pollution Control Administration to carry out a research program at the level indicated in the report issued by the Office of Science and Technology, "A Ten-Year Program of Federal Water Resources Research," February 1966.

In addition to the major problems of municipal and industrial wastes and storm and combined sewer discharges, accelerated research is needed to deal with problems resulting from handling and disposal of radioactive wastes, waste discharged from boats and ships, household or small waste disposal systems, accelerated eutrophication and algae blooms, animal feedlot wastes, agricultural runoff, acid mine drainage, and other diverse sources of pollution.

Research on water quality requirements for all water uses and the persistence and degradation of pollutants in the water environment must be accelerated to help establish water quality criteria and standards. Improved techniques for sampling and identification of pollutants are needed to insure an effective implementation of a water pollution control program.

Many of the research projects should be carried through the pilot plant and field evaluation phases so the effectiveness of the research results can be confirmed and demonstrated on a practical scale.

Of particular interest to the committee is the fresh and nontraditional approach to solution of water pollution problems by the aerospace industry. Gov. Edmund G. Brown of California called attention to the capabilities of these industries and the possible utilization of the technology developed for the space program in water pollution control and water reuse. The State of California has already initiated substantial programs in this area.

The committee understands that the Federal Water Pollution Control Administration has in the past contracted with this industrial group to perform research. The committee urges that the Water Pollution Control Administration, with the additional funds authorized in this bill, exploit that space technology as it may be applicable to the problems of water reuse.

In addition to the excellent in-house research capability, the Secretary is urged to make appropriate use of grant and contract authority

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to obtain the full benefit of the industrial, private, and academic research potential.

#### ESTUARY STUDY

The committee has authorized a study of the Nation's estuaries and estuarine zones. This amendment to S. 2947 is an outgrowth of legislation introduced by Senator Joseph Tydings of Maryland to

provide for necessary comprehensive studies of these areas.

On introduction of his bill, S. 3240, Senator Tydings noted that no basic data now exists on the extent and nature of pollution of estuarine zones of the United States. The questions posed by Senator Tydings made a significant impact on the committee.

It is expected that the Department of Interior, in carrying out the estuarine study authorized in S. 2947, will avail itself of relevant expertise, both inside and outside the Federal Government, to insure that the best minds in the Nation are brought into this study. The broad and thoughtful study of the entire system of estuarine zones in this country, including those bays and harbors of Hawaii, will, to quote Senator Tydings, "provide vital information necessary so that the estuary environment we leave our children is a healthy, ordered, and attractive one."

#### ADVANCED WASTE TREATMENT

In its report entitled "Steps Toward Clean Water," the Subcommittee on Air and Water Pollution noted that encouraging progress has been made in research toward development of advanced waste treatment methods under the directive provided by the Congress in 1961 amendments to the Federal Water Pollution Control Act. The committee finds that there still remains an inordinate lag between research and effective application of research findings.

Particular concern attaches to the problem of industrial waste treatment. These wastes now are either treated in the industrial plans or discharged without treatment into public waters.

Although some segments of industry have made progress in the treatment of their wastes, a larger proportion still have not undertaken programs to treat their effluent.

Considering the rising costs of individual industrial treatment facilities, an alternative must be provided to the choice of inadequate treatment or the removal of the industrial activity from the specific area. A most promising alternative is the potential development of public treatment systems for industrial and nonindustrial effluent.

S. 2947 therefore provides specific extension of the authority for appropriations to assure necessary continuing and intensified research for the development and demonstration of advanced waste treatment methods. S. 2947 also provides for grants and contracts for research, development, and demonstration of new or improved methods for compatible and economically feasible joint treatment of municipal and industrial wastes.

The committee does not intend joint industrial-municipal waste to be limited to treatment of mixed wastes. Obvious economies could result from operation of industrial-municipal plants "under one roof"

even though wastes, due to particular nature of the industrial sewage, are not compatible.

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Elimination of two operating crews, costly land acquisition, duplication of some capital facilities such as operations centers, etc., all could substantially reduce treatment costs. And industrial treatment facilities constructed by a unit of government would be free of tax obligations.

S. 2947 authorizes appropriations of \$25 million annually through fiscal year 1971 and increases demonstration grants to 75 percent in order to encourage participation by local agencies. The committee found that participating public agencies could not readily match the 50-percent demonstration grants under existing law.

#### PROGRAM GRANTS

Federal program grants to States and interstate agencies have been effective in stimulating and assisting in State and local efforts to investigate water pollution problems and to develop procedures for corrective measures. However, there is a tendency on the part of certain States to reduce their annual expenditures to the point where there are insufficient funds to match Federal contributions. Realistic incentives must be provided to improve State water pollution control programs and to halt the tendency to allow such programs to be weakened.

S. 2947 therefore provides that the Federal grants program be increased from \$5 million annually to \$10 million annually. In addition, it is recommended that no State be allocated funds from the \$5 million increase unless its expenditures are increased above those expended for fiscal year 1966, to match the additional Federal grant.

The Federal Water Pollution Control Act affords clear recognition of the primary rights and responsibilities of the States in preventing and controlling water pollution. Moreover, the States have been encouraged to assume and effectively discharge their appropriate role in the national effort to protect and conserve water quality.

The Federal Government provides financial assistance to State and interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution. The objective of this program is to provide a realistic incentive for State governments to provide their agencies with necessary financial resources commensurate with their responsibilities. Federal funds in the amount of \$5 million annually are currently authorized to be made available for this purpose. This authority, unless renewed by the Congress, expires on June 30, 1968.



It is necessary then to extend the Federal grant authority, to prevent the reduction of State funds, and to require that the State and interstate agencies match the additional increased grant amount with funds representing an accompanying increase over the level of their current expenditures.

The need for increased State expenditures remains, heightened by the new provisions of the Water Quality Act of 1965 and the programs authorized in S. 2947. State programs must be strengthened in order to carry out their responsibilities in the intensified construction grants program, to increase the number of qualified, well-trained personnel, to establish water quality standards consistent with the purposes of the act, to participate in the development of comprehensive plans for water pollution control, and to enforce the abatement of existing pollution and violations of water quality standards.

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#### WASTE TREATMENT GRANTS AND \$6 BILLION AUTHORIZATION

Municipal wastes, discharged untreated or inadequately treated, comprise one of the two major sources of the pollution that threaten the Nation's important water resource. The value of the incentive program of Federal grants to assist municipalities in the construction of required treatment works has been effectively demonstrated. However, the statutory authority for supporting funds for this program expires on June 30, 1967, unless extended by Congress.

The present backlog of need should be eliminated in all communities with the installation of secondary treatment works and predictable future needs should be met. Yet the mounting costs of these projects impose a difficult burden on communities.

S. 2947 removes the dollar ceiling on grants in the present law and provides for a Federal grant of 30 percent of the total project costs. This greater Federal share emphasizes the total inadequacy of current levels of authorization. Therefore there is authorized to be appropriated, in order to carry out this program, a total of \$6 billion through fiscal year 1972.

In enacting the Federal Water Pollution Control Act of 1956, Congress declared its policy to provide financial aid to municipalities in connection with the prevention and control of water pollution. Implementation of this policy has been principally in the form of grants to assist municipalities in the construction of necessary treatment works. A huge backlog of treatment facility needs was created during the long period of disregard and neglect that preceded Federal legislation in this field. The staggering financial burden attendant upon the backlog was clearly beyond the fiscal capability of the

Nation's cities and towns. To an appreciable extent, it remains so today.

The committee inquired at length into all aspects of the construction grants program during the conduct of its hearings. Testimony, statements, and data were received from Governors, mayors, and officials responsible for the treatment and disposal of sewage wastes, from representatives of State and municipal organizations, from industry, conservation organizations, and other interested citizen groups, and from administration officials responsible for the effective operation of the grants program. Careful and thorough consideration has been given to their views.

Statistics, updated to June 30, 1965, are indicative of the accomplishments of the construction grants program since its inception early in 1957. A total of 6,200 projects with a combined eligible cost of approximately \$2.6 billion have received Federal financial assistance in the amount of \$658 million, of which \$108 million was provided under the Accelerated Public Works Act. This level of activity, although truly commendable, has been sufficient only to keep pace with the needs created by steady population growth and increased urbanization, and to replace facilities which age, technical advancement, or population relocation rendered obsolescent.

The backlog of unmet needs remains to aggravate the problem of providing for the continuing population and urban growths and obsolescence factors. The size of the backlog, while not fully defined, is formidable. In this regard, the committee is particularly disturbed by the failure of the State water pollution control agencies to develop and furnish complete information on construction requirements.

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Their response to the 1965 annual survey of waste treatment needs conducted by the Conference of State Sanitary Engineers estimated the backlog at 5,277 projects costing \$1.8 billion. The actual backlog is conceded to be much in excess of this "known" backlog. Needs of one State alone, as presented to the committee, approach this figure.

Dr. Hollis Ingraham, testifying for Governor Rockefeller of New York, stated "that barrier is the staggering expense of overcoming the huge backlog of needed sewage treatment works—\$1.7 billion in New York alone."

Interceptor sewers to serve new areas, the needs of communities in some States which are required to be identified by official action, and adequately reflected needs of major metropolitan areas are not included in this total. The breakdown of the 1965 annual survey lists only 52 projects needed to serve populations in excess of 100,000 with an associated construction cost total estimated at \$378 million.

At the committee's request, data in regard to the needs of the Nation's 100 largest cities (all with populations in excess of 100,000) was compiled. The reported present needs of 80 of these cities are for 367 projects estimated to cost \$1.3 billion. It is apparent that the annual survey backlog falls short by at least \$1 billion in accurately reflecting the needs of the larger municipalities. To this must be added deficiencies in estimates for the smaller communities.

Appropriate upgrading of treatment requirements to conform with water quality standards will further add to the cost of eliminating the backlog. Thirty percent of the 5,277 projects included in the annual survey backlog are currently deemed to require only primary treatment. If secondary treatment is considered necessary for these projects, an increase of \$800 million would accrue to the States' \$1.8 billion backlog estimate. In its November 1965 report, "Restoring the Quality of Our Environment," the Environmental Pollution Panel of the President's Science Advisory Committee stated:

Estimates of required expenditures to provide secondary treatment of wastes for 80 percent of our population by 1975 are on the order of \$20 billion, of which Federal funds will be a substantial part.

The primary incentive aspect of the Federal construction grants, while remarkably successful, has not been realized in one very important area. The Nation's larger municipalities with their commensurately larger and ever-growing needs have not found the Federal grants an adequate stimulus.

The dollar ceiling limitations imposed on the grant amount have effectively lowered the Federal share for their projects well below the 30-percent assistance provided to the smaller communities. In many cases, the grant offered to assist the larger project is in the range of 10 to 15 percent of its total cost. Cities such as Chicago, Ill., Nashville, Tenn., Detroit, Mich., and St. Louis, Mo., whose treatment needs entail expenditures of \$67 to \$196.5 million, are understandably less than encouraged by a grant in the amount of \$1.2 million as presently authorized.

In his statement supporting an expanded Federal commitment, Mayor Ralph Locher, of Cleveland, Ohio, testified:

If there is no Federal help available, \$900 million, which should be approximately Cleveland's share for eliminating

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pollution, is equivalent to nearly 15 years of our general fund budget of \$62 million. Think of it. For the next 15 years we would have to devote as much to water pollution as we now

spend for all city operations other than utilities. There is only one word to describe that—"impossible."

The committee finds that the needs of the larger municipalities comprise an appreciable, if not indeed a major, component of the total municipal wastes problem.

#### REIMBURSEMENT

Pressures on the Federal dollar make impossible immediate appropriation of all funds necessary for sewage treatment plant construction. Some States are prepared to go ahead on their own more rapidly than the availability of Federal funds.

Senator Jacob Javits of New York pointed out that his State was prepared to go ahead with its own funds if reimbursement of the Federal share could be provided.

The committee concurs with the senior Senator from New York and commends his State for its positive action in proceeding to solve its pollution problem. S. 2947 contains a prefinancing provision which will allow those States to be reimbursed for approved projects from the Federal share as it becomes available in the regular allocation process.

The committee, however, strongly suggests that the existence of the prefinancing provision does not, of itself, mean that the Federal share of a project's cost will be provided. Those States wishing to take advantage of this provision must remember that in anticipating allocations for approved projects they are assuming a certain risk. But that risk and the Federal policy making it possible should accelerate construction and reduce costs.

#### METROPOLITAN AREA PLANNING INCENTIVE

Metropolitan areas are the major source of sewage. If an adequate level of waste treatment is to be attained without bankrupting our cities, joint planning and, where feasible, joint construction of treatment works is essential. The committee has provided that such metropolitan area planning shall be encouraged through provision of an additional 10 percent of project costs under the basic program. This is an increase of 7 percent over the amount authorized under the Water Quality Act.

It is expected that metropolitan areas in river basins designated under title I will, as part of the plan, be encouraged to construct joint facilities. Therefore, the additional 10 percent provided under section 8 does not apply to 50-percent grants made under the clean rivers program.

## LOAN PROGRAM

The committee, in authorizing establishment of the loan program to offset non-Federal shares, recognized the need of some communities for additional financial help.

In many of the Nation's depressed areas, sewage treatment facilities are vitally needed but the tax base is so eroded that municipalities can neither levy taxes nor float bonds sufficient to meet the local share of a project's cost.

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In consideration of such hard-pressed communities, loans in an amount not to exceed the total amount of the assigned local share of the estimated reasonable cost of construction of the required project will now be available from the Federal Government. Such loans are to be made only if the funds applied for are not otherwise available from private lenders or from other Federal agencies on terms which in the opinion of the Secretary will permit the accomplishment of the project. They are repayable in 40 years and bear interest at a rate favorably equivalent to but not less than the rate payable on the public debt.

The committee expects this program to be administered on the basis of need and further expects those fiscally distressed communities with the most serious pollution problems to be afforded preference under this section.

## INTERNATIONAL POLLUTION

Streams pursue their natural courses despite such arbitrary political demarcations as State lines or even international borders. Pollution, carried across national borders by afflicted streams, menaces the health and welfare of citizens in one country as seriously as in another. Considerations of amity and harmony between neighboring countries have resulted in the formulation of treaties whereby each has pledged the delivery of waters of satisfactory quality. The treaties, however, stop short of empowering their established administering bodies actually to enforce their studied recommendations for abating pollution and improving water quality. Essentially, such recommendations are referred to their respective governments for indicated actions.

Such actions, the committee believes, may be more promptly and effectively taken by authorizing the Secretary of the Interior to apply to cases of international water pollution the enforcement procedures and authorities provided in the act for abating pollution situations wholly within our own Nation. The national interest requires that we should have equivalent rights and privileges in any pollution situation that endangers the health or welfare of our own citizens. Ac-

cordingly, conditions of reciprocal advantages to the United States are made a prerequisite in the exercise of the Secretary's authority under this provision of the act.

#### EXPANDED CONFERENCE PARTICIPATION

The conference stage, the initial procedure specified by the act for enforcing the abatement of pollution, appropriately brings together the State and Federal interests to consider and agree, if possible, on measures that the States themselves may take under their own authorities to resolve the pollution situation. Local interests participate only at the express invitation of the State agency conferee. The committee believes that this undesirably restricts a concerned municipality, industry, or other interested parties from presenting views for the consideration of the conference. The bill imposes, therefore, a responsibility on the chairman of the conference to afford the opportunity for any person contributing to, or affected by, the alleged pollution to present a statement of his views to the conferees. In the interest of orderly progress of the conference, the chairman may prescribe the method or form of presentation.

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#### SUBMISSION OF REQUIRED INFORMATION

Effective measures to abate pollution are necessarily based on information and data as to the character and extent of the pollution, its sources, and its effects upon legitimate water uses. Adequate information and data on the discharges of wastes causing or contributing to the pollution must be gathered before such effective measures may be formulated. In most instances, such information and data are cooperatively made available and exchanged to their mutual benefit by the State, local, and Federal interests. In the absence of such cooperation, the Federal responsibility remains and the gathering of the required facts often imposes an undue burden and expenditure in time, personnel, and monetary resources that must be devoted to this task. The development of sound standards designed to protect, conserve, and enhance the quality of our waters poses equal requirements as to availability and sufficiency of information and data.

Pollution abatement measures are initially developed at the conference stage of the act's enforcement procedures. Federal establishment of water quality standards begins in like manner with a conference of Federal, State, local, and industry representatives. In order that each of these proceedings will have available sufficient data the bill authorizes the Secretary to require the submission of relevant information on the part of any person whose alleged activities result in discharges causing or contributing to water pollution, or whose

activities may affect the quality of the waters involved in the conference. Protection is afforded to trade secrets and secret processes. Failure to respond to the Secretary's request may result in forfeiture of \$100 per day while such failure continues. This provision, in the committee's opinion, will measurably increase the promptness and effectiveness of Federal enforcement and water quality standards activities.

#### COST ESTIMATE AND STUDY

As noted above in the discussion of the expanded grant program, there is a significant lack of information relative to the national requirements for the cost of treating municipal, industrial, and other effluent. The \$6 billion authorized by the committee is based on an estimate of a \$20 billion cost for attaining a minimum of secondary municipal treatment. This \$20 billion neither includes the cost of industrial waste treatment nor the cost of separation of storm and sanitary sewers. Existing information indicates that the cost of pollution control could well exceed \$100 billion.

In order that the Congress can effectively authorize the necessary funds to meet the growing cost of pollution control, a comprehensive analysis of all cost is essential. The committee therefore directs the Secretary to obtain such detailed estimate for the 5-year period beginning July 1, 1968, for submission to the Congress no later than January 10, 1968.

The committee notes with some distress a continuing problem of receiving adequate information on water pollution control needs from State and Federal agencies. It therefore strongly urges that the administration expand its efforts, not only to obtain information but to deliver such data to the appropriate congressional committees.

Also, the committee agrees with the recommendation of Senator Vance Hartke of Indiana that "the scope and impact of this vast

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problem (pollution control) makes imperative that program reports are made available to all Members of the Congress." Program reports, combined with the information contained in the comprehensive study, should better enable the Congress to make the necessary decisions relative to the continuing Federal commitment to water pollution control.

#### STUDY OF BOAT AND VESSEL POLLUTION

The St. Lawrence Seaway, in fulfillment of its purposes and long-held expectations, has served to transform the waters in the Nation's heartland, in particular the Great Lakes, into channels of increased

world and domestic commerce and trade. It is no longer an unusual, albeit still a dramatic, sight to see giant oceangoing vessels plying the waters of the Great Lakes. Our inmost ports have become world harbors. Concurrent with the heavy growth in vessel traffic, we are witnessing an astounding rise in recreational boating use of these same waters. The earned leisure and affluence of our citizens is nowhere more clearly reflected than in the vast fleets of boats of various sizes that dot the waters and cluster in ports and marinas along the lake shores. Waste and refuse discharges from these vessels and boats are already creating pollution problems in the Great Lakes. If allowed to continue unchecked, these problems will mount rapidly and become ever more serious.

Effective programs to control the dumping of refuse and discharge of wastes into all navigable waters from boats and vessels must be developed without delay. The committee is convinced, however, that a full study of the extent and nature of this pollution is an essential prerequisite to the development of such effective programs. Accordingly, the bill directs the Secretary of the Interior to conduct the study in consultation with other directly concerned Federal agencies and to appoint a technical committee of representatives of these agencies and other persons to advise him in formulating recommendations for dealing with boat and vessel pollution. The results of the study, together with the recommendations for an effective control program, are to be submitted to the Congress no later than July 1, 1967.

Among other proposals for controlling such pollution, consideration was given to legislation to specify that the water quality standards, approved by the Secretary in accordance with the Water Quality Act of 1965, include provisions for controlling vessel, boat, and marina pollution sources. The committee regards the water quality standards provisions as entirely comprehensive and extending fully to all sources of pollution. To this end, therefore, standards developed by the States or established by the Secretary should provide for the protection of water quality against these sources of pollution as well as all others.

#### REFUSE ACT AMENDMENT

The Congress first acted to assert the Federal interest in the prevention and control of water pollution by prohibiting the deposit of refuse in navigable waters. This provision, approved March 3, 1899, has as its primary concern the prevention of impediments and obstructions to navigation. A proviso attaching to the general prohibition authorizes the Secretary of the Army, who is responsible

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for administration of the Refuse Act, to permit deposit of such refuse if anchorage and navigation are not injured thereby. S. 2947 adds to this condition a required determination by the Secretary of the Interior that such deposit of refuse is consistent with the purposes of the Federal Water Pollution Control Act. This additional condition will assure that deposits of refuse permitted which have no injurious effect on anchorage and navigation will not be allowed to injuriously affect other legitimate uses of waters to which the Federal Water Pollution Control Act extends.

#### OIL POLLUTION ACT, 1924

The provisions of the Oil Pollution Act, 1924, are designed to protect the Nation's coastal waters against this important source of pollution discharged from vessels. Its administration is primarily directed to preventing a menace to navigation although recognition is also provided to deleterious effects upon health or sea food and danger to persons or property. The opening of the Great Lakes to vessel traffic and the remarkable increase in boat and vessel traffic generally upon the navigable and interstate waters of the country require that similar prohibitive and protective measures be applied in these waters. Accordingly, the bill amends the Oil Pollution Act, 1924, in several respects and extends its application to navigable and interstate as well as coastal waters and the adjoining shorelines of the United States. Oil discharges are prohibited not only from vessels but from boats, shore installations, and terminal facilities. The shore installations which are intended to be within the scope of this act are those facilities at which oil is a primary production factor and which either receive oil or oil products from, or discharge oil or oil products to, boats, vessels, and terminal facilities. In addition to the penalty imposed for violation upon a person, separate penalties are provided against a boat or vessel and against the owner or operator of a shore installation or terminal facility from which oil is discharged. All costs and expenses reasonably incurred in removing the discharged oil from the waters are made a liability against the responsible person in addition to the penalties themselves. Administration of the act's provisions is transferred from the Secretary of the Army to the Secretary of the Interior, consistent with his responsibilities and authorities under the Federal Water Pollution Control Act.

#### PENDING QUESTIONS

##### TECHNICAL TRAINING PROGRAMS

Senator Joseph Tydings of Maryland brought to the attention of the committee the vital need for increased short-term training for

operators of sewage treatment plants. The committee concurs with Senator Tydings' concern over the availability of adequately trained technical and professional personnel in the water pollution field.

The Nation's intensified efforts to overcome the pollution problem create similarly intensified needs for adequate resources of technically trained and competent personnel in all aspects of water pollution control. Proper and efficient operation and maintenance of these plants is the key to the effectiveness of the water pollution control program. If such operation and maintenance are not provided, we will have expended our efforts and our substance largely to no purpose.

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The Federal Water Pollution Control Act presently includes authority in its existing provisions for training purposes. The grants provided to State water pollution control agencies are available to cover the costs of training personnel and the Secretary is authorized to make grants to public and private agencies and institutions and to individuals for training and demonstration projects. He is authorized additionally to provide training in technical matters to public agency personnel and other suitably qualified persons.

There is obviously a greater need to implement and widen the use of existing authorities. Training courses, both short and long term, should be inaugurated and conducted for training municipal and industrial waste treatment plant operators on a regular basis under these authorities.

Senator Edward Kennedy of Massachusetts provided the committee with an extensive analysis of the personnel problem prepared by Dr. N. Bruce Hanes, Director of Environmental Engineering at Tufts University. Dr. Hanes pointed out that full implementation of new and growing water pollution programs may be impeded due to a lack of available manpower equipped with the necessary skills.

Senator Kennedy also provided the committee with correspondence between himself and the Secretary of Labor, W. Willard Wirtz, in which the Senator, among other things, suggested the desirability of convening "a national conference to determine the needs of skilled workers created by recent legislation designed to improve our natural environment, and whether our Federal programs are adequately oriented to meet the needs."

The committee believes Senator Kennedy's suggestion to be of the highest order of importance and urges that—

- (1) The Federal Water Pollution Control Administration report to the Congress on the question of skilled manpower for operation of pollution control programs;

(2) That such national conference as recommended by the Senator be called at the earliest date consistent with orderly procedure; and

(3) That the Department of Labor and the Department of Health, Education, and Welfare reexamine existing manpower development programs and other education programs to determine the extent to which those programs may be used for the training of needed skilled personnel.

#### INCENTIVE ASSISTANCE FOR INDUSTRIES

A number of witnesses testified on the need for tax incentives as a means of reducing the cost of noneconomic pollution control facilities. This is not a matter over which the Senate Public Works Committee has jurisdiction but it affects the overall effort to meet water pollution control and abatement needs. This committee strongly recommends that the appropriate congressional committees give consideration to tax relief proposals for industrial pollution control activities.

For the most part, pollution control does not provide a return on an investment to an industry. Installation of pollution control devices is costly and, in many cases, nonremunerative. The billion dollars of capital investment which will have to be made by the industrial sector for the benefit of the entire society will place a substantial burden on corporate resources, and ultimately on the general public.

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The committee suggests that there are several alternative methods of aiding industry in meeting its pollution control obligations.

Investment tax credits as proposed by Senator John Sherman Cooper of Kentucky, in legislation cosponsored by the chairman of the Senate Public Works Committee, Senator Jennings Randolph of West Virginia is one method whereby industry could recoup the cost of control and abatement of pollution. Senator Abraham Ribicoff of Connecticut, in legislation cosponsored by, among others, the chairman of the subcommittee, Senator Edmund S. Muskie of Maine, provides for accelerated amortization of the cost of pollution control facilities. This may also provide a means of offsetting industry's cost of pollution control. However, both of these methods do not consider the problem confronting those industries with plants having great pollution problems and marginal economic efficiency.

The committee has recommended greater emphasis on joint municipal-industrial treatment systems operated by public agencies. Such systems are eligible for assistance under the sewage treatment grant program.

The proposal by the American Paper Institute for specific Federal grants to municipalities to construct industrial waste treatment facilities would provide an effective means of meeting the needs of both the marginal industries as well as the profitable industries. Such a Federal grant approach would not be inconsistent with public policy because the grant would, in effect, be made to a unit of government. This approach differs from that proposed by Senators Cooper and Ribicoff and is a matter which can and will be considered by this committee. However, realizing that there is no final answer to the problem of financing industrial pollution control, the committee reiterates its strong recommendation that the appropriate committees consider tax relief legislation.

#### RADIOACTIVE POLLUTION

During its hearings on S. 2947 and other legislation relating to water pollution control, the committee heard testimony regarding radioactive pollution in the Colorado River Basin from exposed uranium mill tailings piles, slag heaps resulting from the uranium milling process.

Officials of the Atomic Energy Commission, the Federal Water Pollution Control Administration, and the Colorado River Water Quality Control Project were asked to discuss a report by FWPCA entitled "Disposition and Control of Uranium Mill Tailings Piles in the Colorado River Basin."

The primary area of inquiry was as to whether there is immediate or long-term hazard associated with water erosion of the tailings piles. The report established that, in the past, at a period of peak release of contaminants from operating mills, there was a serious problem with regard to the presence of concentrations of radium 226 in the Animas and San Miguel Rivers.

Fish taken from the San Miguel River in 1956 and 1957 were as much as 98 times more radioactive than natural background levels, and bottom fauna from the Animas River in 1961 contained radium contaminations as much as 30 times greater than normal.

Due to an effective control program instituted by the FWPCA and the State of Colorado, the levels of radioactivity in surface waters

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of the Colorado River Basin are reported to have been reduced to the point where the FWPCA considers the radium levels to be one-third of the maximum permissible levels for drinking water.

Both the Federal Water Pollution Control Administration and the Atomic Energy Commission agreed that instances such as the San

Miguel and Animas Rivers situations were a result of incomplete control of waste discharges from operating mills. The committee, however, was concerned by information in the report which indicated that the problem in the Colorado River Basin still remains due to inadequate control of the exposed tailings piles.

Water and wind erosion of the tailings piles result in deposits of radium 226 (half life, 1,620 years) and thorium 230 (half life, 80,000 years) in the river bottom. Also, the potential of concentration of radioactive materials in crops irrigated by Colorado River water and in people who consume water from the river concerned the committee.

There was general disagreement between FWPCA and the AEC as to the nature of the hazard from the piles. Mr. Murray Stein, chief enforcement officer for FWPCA, indicated that the Water Pollution Control Administration was not satisfied that long-term hazard did not exist and noted that the Administration recommended stabilization of the piles. Dr. Peter Morris of the Atomic Energy Commission stated: "I do not think the data available at this time support a conclusion that there is long-term radiological hazard."

The committee is not convinced that the radioactive hazard can be passed off so easily and urges the Federal Water Pollution Control Administration move expeditiously to establish responsibility for control of the tailings piles, and provide the committee with adequate assurance that any control measures applied will be sufficient to achieve adequate long-term protection of the health of the people who live within the area, or depend upon the use, of the Colorado River.

The committee feels that the Atomic Energy Commission has not satisfactorily discharged its responsibilities toward the prevention of radioactive pollution in the Colorado River Basin. The AEC has a clear obligation to protect the public from radioactive hazards generated by activities it licenses, regardless of the traditional regulation of radium by the States. Further, through its licensing procedures and the 10 CFR part 20 regulations, the AEC has the authority necessary to control radioactive releases from tailings piles of operating and closed mills. In view of the concern of the FWPCA and the Public Health Service, the committee believes the AEC has not fulfilled its regulatory function or exercised its authority to prevent radioactivity from the tailings piles in the Colorado River Basin.

The Counsel for the AEC testified that the AEC could require stabilization of the tailings piles if the pile represented a risk to the public health and safety. The FWPCA testified that the piles did represent such a risk. Senator Muskie suggested that the President's Executive Order 11258, dealing with prevention and control of water pollution from Federal activities, contained a section which provided

the AEC with more general regulatory authority. This section 1, subsection (3) states:

Pollution caused by all other operations of the Federal Government such as water resources projects and operations under Federal loans, grants, and contracts, shall be reduced to the lowest level practicable.

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This order was issued after the committee urged prompt steps to abate pollution from Federal installations, and from facilities of recipients of Federal grants and contract funds.

Although the AEC's counsel offered a legal opinion to the contrary, the committee feels that this Executive order confers upon the AEC sufficient regulatory authority to control the pollution from the uranium mill tailings piles of operating mills under contract to the Government, and that the AEC can provide direction for those owners of nonoperating mills (which operated under Government contract) to provide adequate control of the tailings piles.

The question of radioactive pollution from uranium mill tailings in the Colorado River Basin is just one aspect of the problem of disposition of radioactive wastes. A more far-reaching and long-range problem is the potential hazard from release of radioactivity associated with nuclear powerplants.

Dr. Malcolm L. Peterson, in a statement on behalf of the Greater St. Louis Citizens' Committee for Nuclear Information, told the committee:

Because nuclear powerplants do not pollute the air with smoke, nor produce any of the ingredients of photochemical smog, they are regarded as "clean," but it should not be forgotten that radioactivity, though invisible, is also a contaminant.

The committee is concerned that standards promulgated relative to industrial exposure to radioactivity may not be applicable to the general population. The statistical average-man concept of radiation exposure standards does not recognize persons in the population who may adversely react to lower levels of exposure or to those persons who, for medical and other reasons, may have to be exposed to greater than natural background levels of radioactivity.

The Federal Radiation Council and other groups concerned with limits of exposure to radioactivity have suggested that there can be no single permissible or acceptable level of exposure without regard to the reason for permitting the exposure; that the general practice should be to reduce exposure to radiation.

Senator E. L. (Bob) Bartlett of Alaska, in a speech before the Senate on June 23, 1966, noted that:

The National Advisory Committee for Radiation in its report to the Surgeon General has proposed a greatly increased Federal effort to strengthen our research and training programs in radiology, to strengthen our laboratory and statistical resources and to develop standards of acceptable radiation exposure that make clear "the balance of profit and risk" involved in all matters pertaining to the human application of ionizing radiation.

Senator Bartlett went on to say:

The present guidelines are drawn without adequate knowledge and without adequate consultation with representatives of the life sciences. Until now the safety standards have been administered largely by the men who make the radiation. They are hardly unbiased.

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Further, an ad hoc committee of the National Committee on Radiation Protection has stated:

Because of our present limited information, an accurate estimate of the hazard and the benefits of a specific level of radiation is not possible. Therefore, pending more precise information, we recommend that the population permissible dose for manmade radiation be based on the average natural background level.

Because of the potential long-term genetic effects associated with any level of radioactive exposure, it is not possible to demonstrate at this time that present AEC standards are adequate. The question of radioactive exposure is so important and the existing knowledge is sufficiently sparse that the committee must accept the concept that "the population permissible dose for manmade radiation be based on the average natural background level."

It is the committee's intent, therefore, to observe closely those peaceful uses of nuclear energy which may have the effect of increasing human exposure to radiation. The committee intends to explore fully the question of disposition of radioactive wastes from all sources and has requested an initial report on what is being done to develop information necessary to assure protection of the public health from the Federal Water Pollution Control Agency and the Division of Radiological Health. It is the committee's intention, if the information received so justifies, to hold extensive hearings into the question of disposition of radioactive wastes from nuclear powerplants and other sources.

Finally, the committee wishes to commend Senator E. L. (Bob) Bartlett of Alaska for the extensive information he has provided the committee relating to radioactive pollution. Senator Bartlett has spoken out on this subject on numerous occasions both on and off the Senate floor. The committee expects to rely on his expertise on this subject at such time as additional hearings are scheduled.

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### CHANGES IN EXISTING LAW

In compliance with subsection 4 of rule XXIX of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

#### FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED

(33 U.S.C. 466 et seq.)

#### *TITLE I—WATER POLLUTION CONTROL PROGRAM*

##### DECLARATION OF POLICY

SECTION 1. (a) The purpose of this Act is to enhance the quality and value of our water resources and to establish a national policy for the prevention, control, and abatement of water pollution.

(b) In connection with the exercise of jurisdiction over the waterways of the Nation and in consequence of the benefits resulting to the public health and welfare by the prevention and control of water pollution, it is hereby declared to be the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States in preventing and controlling water pollution, to support and aid technical research relating to the prevention and control of water pollution, and to provide Federal technical services and financial aid to State and interstate agencies and to municipalities in connection with the prevention and control of water pollution. The Secretary of Health, Education, and Welfare (hereinafter in this Act called "Secretary") shall administer this Act through the Administration created by section 2 of this Act, and with the assistance of an Assistant Secretary of Health, Education, and Welfare designated by him, shall supervise and direct (1) the head of such Administration in administering this Act and (2) the administration of all other functions of the Department of Health, Education, and Welfare related



to water pollution. Such Assistant Secretary shall perform such additional functions as the Secretary may prescribe.

(c) Nothing in this Act shall be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.

#### FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

SEC. 2. Effective ninety days after the date of enactment of this section there is created within the Department of Health, Education, and Welfare a Federal Water Pollution Control Administration (hereinafter in this Act referred to as the "Administration"). The head of the Administration shall be appointed, and his compensation

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fixed, by the Secretary. The head of the Administration may, in addition to regular staff of the Administration, which shall be initially provided from the personnel of the Department, obtain, from within the Department or otherwise as authorized by law, such professional, technical, and clerical assistance as may be necessary to discharge the Administration's functions and may for that purpose use funds available for carrying out such functions; and he may delegate any of his functions to, or otherwise authorize their performance by, an officer or employee of, or assigned or detailed to, the Administration.

#### COMPREHENSIVE PROGRAMS FOR WATER POLLUTION CONTROL

SEC. 3. (a) The Secretary shall, after careful investigation, and in cooperation with other Federal agencies, with State water pollution control agencies and interstate agencies, and with the municipalities and industries involved, prepare or develop comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters. In the development of such comprehensive programs due regard shall be given to the improvements which are necessary to conserve such waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses. For the purpose of this section, the Secretary is authorized to make joint investigations with any such agencies of the condition of any waters in any State or States, and of the discharges of any sewage, industrial wastes, or substance which may adversely affect such waters.

(b) (1) In the survey or planning of any reservoir by the Corps of Engineers, Bureau of Reclamation, or other Federal agency, consideration shall be given to inclusion of storage for regulation of stream-flow for the purpose of water quality control, except that any such

storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source.

(2) The need for and the value of storage for this purpose shall be determined by these agencies, with the advice of the Secretary, and his views on these matters shall be set forth in any report or presentation to the Congress proposing authorization or construction of any reservoir including such storage.

(3) The value of such storage shall be taken into account in determining the economic value of the entire project of which it is a part, and costs shall be allocated to the purpose of water quality control in a manner which will insure that all project purposes share equitably in the benefits of multiple-purpose construction.

(4) Costs of water quality control features incorporated in any Federal reservoir or other impoundment under the provisions of this Act shall be determined and the beneficiaries identified and if the benefits are widespread or national in scope, the costs of such features shall be nonreimbursable.

#### INTERSTATE COOPERATION AND UNIFORM LAWS

SEC. 4. (a) The Secretary shall encourage cooperative activities by the States for the prevention and control of water pollution; encourage the enactment of improved and, so far as practicable, uniform State laws relating to the prevention and control of water pollution; and

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encourage compacts between States for the prevention and control of water pollution.

(b) The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for (1) cooperative effort and mutual assistance for the prevention and control of water pollution and the enforcement of their respective laws relating thereto, and (2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements and compacts. No such agreement or compact shall be binding or obligatory upon any State a party thereto unless and until it has been approved by the Congress.

#### RESEARCH, INVESTIGATIONS, TRAINING, AND INFORMATION

SEC. 5. (a) The Secretary shall conduct in the Department of Health, Education, and Welfare and encourage, cooperate with, and render assistance to other appropriate public (whether Federal, State,

interstate, or local) authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and promote the coordination of, research, investigations, experiments, demonstrations, and studies relating to the causes, control, and prevention of water pollution. In carrying out the foregoing, the Secretary is authorized to—

(1) collect and make available, through publications and other appropriate means, the results of and other information as to research, investigations, and demonstrations relating to the prevention and control of water pollution, including appropriate recommendations in connection therewith;

(2) make grants-in-aid to public or private agencies and institutions and to individuals for research or training projects and for demonstrations, and provide for the conduct of research, training, and demonstrations by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes;

(3) secure, from time to time and for such periods as he deems advisable, the assistance and advice of experts, scholars, and consultants as authorized by section 15 of the Administrative Expenses Act of 1946 (5 U.S.C. 55a);

(4) establish and maintain research fellowships in the Department of Health, Education, and Welfare with such stipends and allowances, including traveling and subsistence expenses, as he may deem necessary to procure the assistance of the most promising research fellowships: *Provided*, That the Secretary shall report annually to the appropriate committees of Congress on his operations under this paragraph; and

(5) provide training in technical matters relating to the causes, prevention, and control of water pollution to personnel of public agencies and other persons with suitable qualifications.

(b) The Secretary may, upon request of any State water pollution control agency, or interstate agency, conduct investigations and research and make surveys concerning any specific problem of water pollution confronting any State, interstate agency, community, municipality, or industrial plant, with a view of recommending a solution of such problem.

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(c) The Secretary shall, in cooperation with other Federal, State, and local agencies having related responsibilities, collect and disseminate basic data on chemical, physical, and biological water quality and other information insofar as such data or other informa-

tion relate to water pollution and the prevention and control thereof.

(d) (1) In carrying out the provisions of this section the Secretary shall develop and demonstrate under varied conditions (including conducting such basic and applied research, studies, and experiments as may be necessary):

(A) Practicable means of treating municipal sewage and other waterborne wastes to remove the maximum possible amounts of physical, chemical, and biological pollutants in order to restore and maintain the maximum amount of the Nation's water at a quality suitable for repeated reuse;

(B) Improved methods and procedures to identify and measure the effects of pollutants on water uses, including those pollutants created by new technological developments; and

(C) Methods and procedures for evaluating the effects on water quality and water uses of augmented streamflows to control water pollution not susceptible to other means of abatement.

[(2) For the purposes of this subsection there is authorized to be appropriated not more than \$5,000,000 for any fiscal year, and the total sum appropriated for such purposes shall not exceed \$25,000,000.]

*(2) For the purposes of this subsection there is authorized to be appropriated \$20,000,000 for the fiscal year ending June 30, 1968, \$25,000,000 for the fiscal year ending June 30, 1969, and \$30,000,000 for the fiscal year ending June 30, 1970, and each fiscal year thereafter, and sums so appropriated shall remain available until expended.*

(e) The Secretary shall establish, equip, and maintain field laboratory and research facilities, including, but not limited to, one to be located in the northeastern area of the United States, one in the Middle Atlantic area, one in the southeastern area, one in the mid-western area, one in the southwestern area, one in the Pacific Northwest, and one in the State of Alaska, for the conduct of research, investigations, experiments, field demonstrations and studies, and training relating to the prevention and control of water pollution. Insofar as practicable, each such facility shall be located near institutions of higher learning in which graduate training in such research might be carried out.

(f) The Secretary shall conduct research and technical development work, and make studies, with respect to the quality of the waters of the Great Lakes, including an analysis of the present and projected future water quality of the Great Lakes under varying conditions of waste treatment and disposal, an evaluation of the water quality needs of those to be served by such waters, an evaluation of municipal, industrial, and vessel waste treatment and disposal practices with respect to such waters, and a study of alternate means

of solving water pollution problems (including additional waste treatment measures) with respect to such waters.

(g) (1) *The Secretary shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies*

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*and private organizations, institutions, and individuals, conduct and promote, and encourage contributions to, a comprehensive study of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such study shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.*

(2) *In conducting the above study, the Secretary shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.*

(3) *The Secretary shall submit to the Congress a final report of the study authorized by this subsection not later than three years after the date of enactment of this subsection. Copies of the report shall be made available to all interested parties, public and private. The report shall include, but not be limited to—*

(A) *an analysis of the importance of estuaries to the economic and social well-being of the people of the United States and of the effects of pollution upon the use and enjoyment of such estuaries;*

(B) *a discussion of the major economic, social, and ecological trends occurring in the estuarine zones of the Nation;*

(C) *recommendations for a comprehensive national program for the preservation, study, use, and development of estuaries of the Nation, and the respective responsibilities which should be assumed by Federal, State, and local governments and by public and private interests.*

(4) *There is authorized to be appropriated the sum of \$1,000,000 per annum for the fiscal year ending June 30, 1967, and the two succeeding fiscal years, to carry out the purposes of this subsection.*

(5) *The term "estuarine zones" means an environmental system consisting of an estuary and those transitional areas which are con-*

*sistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels.*

*The term "estuary" means all or part of the mouth of a navigable or interstate river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.*

#### GRANTS FOR RESEARCH AND DEVELOPMENT

[SEC. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, and for the purpose of reports, plans, and specifications in connection therewith. The Secretary is authorized to provide for the conduct of research and demonstrations relating to new or improved methods of controlling the discharge into any waters

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of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes, by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes, except that not to exceed 25 per centum of the total amount appropriated under authority of this section for any fiscal year may be expended under authority of this sentence during such fiscal year.

[(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by an appropriate State water pollution control agency or agencies and by the Secretary; (2) no grant shall be made for any project in an amount exceeding 50 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration of a new or improved method of controlling the discharge into any water of untreated or inadequately treated sewage or other waste from sewers which carry storm water or both storm water and sewage or other wastes.

[(c) There are hereby authorized to be appropriated for the fiscal

year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purposes of this section. Sums so appropriated shall remain available until expended. No grant or contract shall be made for any project in an amount exceeding 5 per centum of the total amount authorized by this section in any one fiscal year.]

Sec. 6. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of—

(1) assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other wastes from sewers which carry storm water or both storm water and sewage or other wastes, or

(2) assisting in the development of any project which will demonstrate advanced waste treatment and water purification methods or new or improved methods of joint treatment systems for municipal and industrial wastes.

and for the purpose of reports, plans, and specifications in connection therewith. The Secretary is authorized to provide for the conduct of research and demonstrations relating to the purpose set forth in clause (1) or (2) by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes; except that not to exceed 25 per centum of the total amount appropriated under authority of this section for any fiscal year may be expended under authority of this sentence during such fiscal year.

(b) Federal grants under this section shall be subject to the following limitations:

(1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary;

(2) No grant shall be made for any project in an amount exceeding 75 per centum of the estimated reasonable cost thereof as determined by the Secretary; and

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(3) No grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration for the purpose set forth in clause (1) or (2) of subsection (a).

(c) For the purposes of this section there are authorized to be appropriated—

(1) for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in clause (1) of subsection (a), including contracts pursuant to such subsection for such purpose; and

(2) for the fiscal year ending June 30, 1967, and for each of the next four succeeding fiscal years, the sum of \$25,000,000 per fiscal year for the purpose set forth in clause (2) of subsection (a), including contracts pursuant to such subsection for such purpose.

Sums so appropriated shall remain available until expended. No grant or contract for the purpose of either such clause (1) or (2) shall be made for any project in any fiscal year in an amount exceeding 12½ per centum of the total amount authorized for the purpose of such clause in such fiscal year.

#### GRANTS FOR WATER POLLUTION CONTROL PROGRAMS

SEC. 7. (a) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1961, \$3,000,000, [and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000] for each succeeding fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1972, \$10,000,000 for grants to States and to interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution.

(b) The portion of the sums appropriated pursuant to subsection (a) for a fiscal year which shall be available for grants to interstate agencies and the portion thereof which shall be available for grants to States shall be specified in the Act appropriating such sums.

(c) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to the several States, in accordance with regulations, on the basis of (1) the population, (2) the extent of the water pollution problem, and (3) the financial need of the respective States.

(d) From each State's allotment under subsection (c) for any fiscal year the Secretary shall pay to such State an amount equal to its Federal share (as determined under subsection (h)) of the cost of carrying out its State plan approved under subsection (f), including the cost of training personnel for State and local water pollution control work and including the cost of administering the State plan.

(e) From the sums available therefor for any fiscal year the Secretary shall from time to time make allotments to interstate agencies.



in accordance with regulations, on such basis as the Secretary finds reasonable and equitable. He shall from time to time pay to each such agency, from its allotment, an amount equal to such portion of the cost of carrying out its plan approved under subsection (f) as may be determined in accordance with regulations, including the cost of training personnel for water pollution control work and including the

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cost of administering the interstate agency's plan. The regulations relating to the portion of the cost of carrying out the interstate agency's plan which shall be borne by the United States shall be designed to place such agencies, so far as practicable, on a basis similar to that of the States.

(f) The Secretary shall approve any plan for the prevention and control of water pollution which is submitted by the State water pollution control agency or, in the case of an interstate agency, by such agency, if such plan—

(1) provides for administration or for the supervision of administration of the plan by the State water pollution control agency or, in the case of a plan submitted by an interstate agency, by such interstate agency;

(2) provides that such agency will make such reports, in such form and containing such information, as the Secretary may from time to time reasonably require to carry out his functions under this Act;

(3) sets forth the plans, policies, and methods to be followed in carrying out the State (or interstate) plan and in its administration;

(4) provides for extension or improvement of the State or interstate program for prevention and control of water pollution;

(5) provides such accounting, budgeting, and other fiscal methods and procedures as are necessary for the proper and efficient administration of the plan; and

(6) sets forth the criteria used by the State in determining priority of projects as provided in section 8(b) (4).

The Secretary shall not disapprove any plan without first giving reasonable notice and opportunity for hearing to the State water pollution control agency or interstate agency which has submitted such plan.

(g) (1) Whenever the Secretary, after reasonable notice and opportunity for hearing to a State water pollution control agency or interstate agency finds that—

(A) the plan submitted by such agency and approved under this section has been so changed that it no longer complies with a

requirement of subsection (f) of this section; or

(B) in the administration of the plan there is a failure to comply substantially with such a requirement, the Secretary shall notify such agency that no further payments will be made to the State or to the interstate agency, as the case may be, under this section (or in his discretion that further payments will not be made to the State, or to the interstate agency, for projects under or parts of the plan affected by such failure) until he is satisfied that there will no longer be any such failure. Until he is so satisfied, the Secretary shall make no further payments to such State, or to such interstate agency, as the case may be, under this section (or shall limit payments to projects under or parts of the plan in which there is no such failure).

(2) If any State or any interstate agency is dissatisfied with the Secretary's action with respect to it under this subsection, it may appeal to the United States court of appeals for the circuit in which such State (or any of the member States, in the case of an interstate agency) is located. The summons and notice of appeal may be served in any place in the United States. The findings of fact by the Sec-

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retary, unless contrary to the weight of the evidence, shall be conclusive; but the court, for good cause shown, may remand the case to the Secretary to take further evidence, and the Secretary may thereupon make new or modified findings of fact and may modify his previous action. Such new or modified findings of fact shall likewise be conclusive unless contrary to the weight of the evidence. The court shall have jurisdiction to affirm the action of the Secretary or to set it aside, in whole or in part. The judgment of the court shall be subject to review by the Supreme Court of the United States upon certiorari or certification as provided in title 28, United States Code, section 1254.

(h) (1) The "Federal share" for any State shall be 100 per centum less that percentage which bears the same ratio to 50 per centum as the per capita income of such State bears to the per capita income of the United States, except that (A) the Federal share shall in no case be more than  $66\frac{2}{3}$  per centum or less than  $33\frac{1}{3}$  per centum, and (B) the Federal share for Puerto Rico and the Virgin Islands shall be  $66\frac{2}{3}$  per centum.

(2) The "Federal shares" shall be promulgated by the Secretary between July 1 and September 30 of each even-numbered year, on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive

years for which satisfactory data are available from the Department of Commerce.

(3) As used in this subsection, the term "United States" means the fifty States and the District of Columbia.

(4) Promulgations made before satisfactory data are available from the Department of Commerce for a full year on the per capita income of Alaska shall prescribe a Federal share for Alaska of 50 per centum and, for purposes of such promulgations, Alaska shall not be included as part of the "United States". Promulgations made thereafter but before per capita income data for Alaska for a full three-year period are available for the Department of Commerce shall be based on satisfactory data available therefrom for Alaska for such one full year or, when such data are available for a two-year period, for such two years.

(i) The population of the several States shall be determined on the basis of the latest figures furnished by the Department of Commerce.

(j) The method of computing and paying amounts pursuant to subsection (d) or (e) shall be as follows:

(1) The Secretary shall, prior to the beginning of each calendar quarter or other period prescribed by him, estimate the amount to be paid to each State (or to each interstate agency in the case of subsection (e)) under the provisions of such subsection for such period, such estimate to be based on such records of the State (or the interstate agency) and information furnished by it, and such other investigation, as the Secretary may find necessary.

(2) The Secretary shall pay to the State (or to the interstate agency), from the allotment available therefor, the amount so estimated by him for any period, reduced or increased, as the case may be, by any sum (not previously adjusted under this paragraph) by which he finds that his estimate of the amount to be paid such State (or such interstate agency) for any prior period under such subsection

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was greater or less than the amount which should have been paid to such State (or such agency) for such prior period under such subsection. Such payments shall be made through the disbursing facilities of the Treasury Department, in such installments as the Secretary may determine.

#### GRANTS FOR CONSTRUCTION

SEC. 8. (a) The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the

construction of necessary treatment works to prevent the discharge of untreated or inadequately treated sewage or other waste into any waters and for the purpose of reports, plans, and specifications in connection therewith.

[(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) except as otherwise provided in this clause, no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary, or in an amount exceeding \$1,200,000, whichever is the smaller: *Provided further*, That, in the case of a project which will serve more than one municipality (A) the Secretary shall, on such basis as he determines to be reasonable and equitable, allocate to each municipality to be served by such project its share of the estimated reasonable cost of such project, and shall then apply the limitations provided in this clause (2) to each such share as if it were a separate project to determine the maximum amount of any grant which could be made under this section with respect to each such share, and the total of all the amounts so determined or \$4,800,000, whichever is the smaller, shall be the maximum amount of the grant which may be made under this section on account of such project, and (B) for the purpose of the limitation in the last sentence of subsection (d), the share of each municipality so determined shall be regarded as a grant for the construction of treatment works; (3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; (4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs; and (5) no grant shall be made under this section for any project in any State in an amount exceeding \$250,000 until a grant has been made thereunder for each project in such State (A) for which an application was filed with the appropriate State water pollution control agency prior to one year after the date of enactment of this clause and (B) which the Secretary determines met the requirements of this section and regulations thereunder as in effect prior to the date of enactment of this clause. The limitations

of \$1,200,000 and \$4,800,000 imposed by clause (2) of this subsection shall not apply in the case of grants made under this section from

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funds allocated under the third sentence of subsection (c) of this section if the State agrees to match equally all Federal grants made from such allocation for projects in such State.]

(b) *Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary: Provided, That the grantee agrees to pay the remaining cost: Provided further, That, in the case of a project which will serve more than one municipality, the Secretary shall, on such basis as he determines to be reasonable and equitable, allocate to each municipality to be served by such project its share of the estimated reasonable cost of such project; (3) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; and (4) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs.*

(c) In determining the desirability of projects for treatment works and of approving Federal financial aid in connection therewith, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for each fiscal year ending on or before June 30, 1965, and the first \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance

with regulations, as follows: (1) 50 per centum of such sums in the ratio that the population of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the quotient obtained by dividing the per capita income of the United States by the per capita income of each State bears to the sum of such quotients for all the States. All sums in excess of \$100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States. Sums allotted to a State under the two preceding sentences which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b) (1) of this section and certified as entitled to priority under subsection (b) (4) of this section, shall be reallocated by the Secretary, on such basis as he determines to be reasonable and equitable and in accord-

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ance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made because of lack of funds: *Provided, however,* That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or activity. Any sum made available to a State by reallocation under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second, third, and fourth sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this [section.] *section, except that in the case of any project on which construction was initiated in such State after June 30, 1966, and which meets the requirements for assistance under this section but was constructed without such assistance, such allotments for any fiscal year ending prior to July 1, 1972, shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1972, to the extent that assistance could have been provided under this section if such project had been approved pursuant to this section and adequate funds had been available. In the case of any project on which construction was initiated in such State after June 30, 1966,*

*and which was constructed with assistance pursuant to this section but the amount of such assistance was a lesser per centum of the cost of construction than was allowable pursuant to this section, such allotments shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1972, to the extent that assistance could have been provided under this section if adequate funds had been available. For purposes of this section, population shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce, and per capita income for each State and for the United States shall be determined on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce.*

(d) There are hereby authorized to be appropriated for each fiscal year through and including the fiscal year ending June 30, 1961, the sum of \$50,000,000 per fiscal year for the purpose of making grants under this section. There are hereby authorized to be appropriated, for the purpose of making grants under this section, \$80,000,000 for the fiscal year ending June 30, 1962, \$90,000,000 for the fiscal year ending June 30, 1963, \$100,000,000 for the fiscal year ending June 30, 1964, \$100,000,000 for the fiscal year ending June 30, 1965, \$150,000,000 for the fiscal year ending June 30, 1966, [and \$150,000,000 for the fiscal year ending June 30, 1967. Sums so appropriated shall remain available until expended. At least 50 per centum of the funds so appropriated for each fiscal year ending on or before June 30, 1965, and at least 50 per centum of the first \$100,000,000 so appropriated for each fiscal year beginning on or after July 1, 1965, shall be used for grants for the construction of treatment works servicing municipalities of one hundred and twenty-five thousand population or under] \$150,000,000 for the fiscal year ending June 30, 1967, \$600,000,000 for

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*the fiscal year ending June 30, 1968, \$1,000,000,000 for the fiscal year ending June 30, 1969, \$1,250,000,000 for the fiscal year ending June 30, 1970, \$1,500,000,000 for the fiscal year ending June 30, 1971, and \$1,500,000,000 for the fiscal year ending June 30, 1972. Sums so appropriated shall remain available until expended.*

(e) The Secretary shall make payments under this section through the disbursing facilities of the Department of the Treasury. Funds so paid shall be used exclusively to meet the cost of construction of the project for which the amount was paid. As used in this section the term "construction" includes preliminary planning to determine the economic and engineering feasibility of treatment works, the engineer-

ing, architectural, legal, fiscal, and economic investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary to the construction of treatment works; and the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works; and the inspection and supervision of the construction of treatment works.

(f) Notwithstanding any other provisions of this section, the Secretary may increase the amount of a grant made under subsection (b) of this section by an additional 10 per centum of the [amount of such grant] *total construction costs* for any project which has been certified to him by an official State, metropolitan, or regional planning agency empowered under State or local laws or interstate compact to perform metropolitan or regional planning for a metropolitan area within which the assistance is to be used, or other agency or instrumentality designated for such purposes by the Governor (or Governors in the case of interstate planning) as being in conformity with the comprehensive plan developed or in process of development for such metropolitan area. For the purposes of this subsection, the term "metropolitan area" means either (1) a standard metropolitan statistical area as defined by the Bureau of the Budget, except as may be determined by the President as not being appropriate for the purposes hereof, or (2) any urban area, including those surrounding areas that form an economic and socially related region, taking into consideration such factors as present and future population trends and patterns of urban growth, location of transportation facilities and systems, and distribution of industrial, commercial, residential, governmental, institutional, and other activities, which in the opinion of the President lends itself as being appropriate for the purposes hereof.

(g) The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on projects for which grants are made under this section shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C., secs. 276a through 276a-5). The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15) and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c).

(h) (1) *Upon application the Secretary may make a loan to any State, municipality, or intermunicipal or interstate agency to which he*



*has agreed to make a grant pursuant to this section, for the purpose of helping*

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*to finance its share of the cost of construction for which such grant is to be made. Any such loan shall be made only (A) after the Secretary determines that such State, municipality, or agency has made satisfactory provision for assuring proper and efficient operation and maintenance of the treatment works being constructed after completion of such construction, and (B) if such State, municipality, or agency shows it is unable to secure such funds from non-Federal sources upon terms and conditions which the Secretary determines to be reasonable and consistent with the purposes of this section. Loans pursuant to this subsection shall bear interest at a rate which the Secretary determines to be adequate to cover the costs of the funds to the Treasury as determined by the Secretary of the Treasury, taking into consideration the current average yields of outstanding marketable obligations of the United States having maturities comparable to the maturities of loans made pursuant to this subsection.*

*(2) Loans pursuant to this subsection shall mature within such period as may be determined by the Secretary to be appropriate but not exceeding forty years.*

*(3) There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this subsection but not to exceed a total of \$250,000,000. No loan or loans pursuant to this subsection with respect to any one project shall exceed an amount equal to 10 per centum of such total.*

#### WATER POLLUTION CONTROL ADVISORY BOARD

SEC. 9. (a) (1) There is hereby established in the Department of Health, Education, and Welfare, a Water Pollution Control Advisory Board, composed of the Secretary or his designee, who shall be chairman, and nine members appointed by the President, none of whom shall be Federal officers or employees. The appointed members, having due regard for the purposes of this Act, shall be selected from among representatives of various State, interstate, and local governmental agencies, of public or private interests contributing to, affected by, or concerned with water pollution, and of other public and private agencies, organizations, or groups demonstrating an active interest in the field of water pollution prevention and control, as well as other individuals who are expert in this field.

(2) (A) Each member appointed by the President shall hold office for a term of three years, except that (i) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his

predecessor was appointed shall be appointed for the remainder of such term, and (ii) the terms of office of the members first taking office after June 30, 1956, shall expire as follows: three at the end of one year after such date, three at the end of two years after such date, and three at the end of three years after such date, as designated by the President at the time of appointment, and (iii) the term of any member under the preceding provisions shall be extended until the date on which his successor's appointment is effective. None of the members appointed by the President shall be eligible for reappointment within one year after the end of his preceding term but terms commencing prior to the enactment of the Water Pollution Control Act Amendments of 1956 shall not be deemed "preceding terms" for purposes of this sentence.

(B) The members of the Board who are not officers or employees of the United States, while attending conferences or meetings of the

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Board or while otherwise serving at the request of the Secretary, shall be entitled to receive compensation at a rate to be fixed by the Secretary, but not exceeding \$50 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(b) The Board shall advise, consult with, and make recommendations to the Secretary on matters of policy relating to the activities and functions of the Secretary under this Act.

(c) Such clerical and technical assistance as may be necessary to discharge the duties of the Board shall be provided from the personnel of the Department of Health, Education, and Welfare.

#### ENFORCEMENT MEASURES AGAINST POLLUTION OF INTERSTATE OR NAVIGABLE WATERS

SEC. 10. (a) The pollution of interstate or navigable waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge into a tributary of such waters), which endangers the health or welfare of any persons, shall be subject to abatement as provided in this Act.

(b) Consistent with the policy declaration of this Act, State and interstate action to abate pollution of interstate or navigable waters shall be encouraged and shall not, except as otherwise provided by or pursuant to court order under subsection (h), be displaced by Federal enforcement action.

(c) (1) If the Governor of a State or a State water pollution control agency files, within one year after the date of enactment of this subsection, a letter of intent that such State, after public hearings, will before June 30, 1967, adopt (A) water quality criteria applicable to interstate waters or portions thereof within such State, and (B) a plan for the implementation and enforcement of the water quality criteria adopted, and if such criteria and plan are established in accordance with the letter of intent, and if the Secretary determines that such State criteria and plan are consistent with paragraph (3) of this subsection, such State criteria and plan shall thereafter be the water quality standards applicable to such interstate waters or portions thereof.

(2) If a State does not (A) file a letter of intent or (B) establish water quality standards in accordance with paragraph (1) of this subsection, or if the Secretary or the Governor of any State affected by water quality standards established pursuant to this subsection desires a revision in such standards, the Secretary may, after reasonable notice and a conference of representatives of appropriate Federal departments and agencies, interstate agencies, States, municipalities and industries involved, prepare regulations setting forth standards of water quality to be applicable to interstate waters or portions thereof. If, within six months from the date the Secretary publishes such regulations, the State has not adopted water quality standards found by the Secretary to be consistent with paragraph (3) of this subsection, or a petition for public hearing has not been filed under paragraph (4) of this subsection, the Secretary shall promulgate such standards.

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(3) Standards of quality established pursuant to this subsection shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act. In establishing such standards the Secretary, the Hearing Board, or the appropriate State authority shall take into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

(4) If at any time prior to 30 days after standards have been promulgated under paragraph (2) of this subsection, the Governor of any State affected by such standards petitions the Secretary for a hearing, the Secretary shall call a public hearing, to be held in or near one or more of the places where the water quality standards will take effect, before a Hearing Board of five or more persons appointed by the Secretary. Each State which would be affected by such standards shall be given an opportunity to select one member of the Hearing Board.

The Department of Commerce and other affected Federal departments and agencies shall each be given an opportunity to select a member of the Hearing Board and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. The members of the Board who are not officers or employees of the United States, while participating in the hearing conducted by such Hearing Board or otherwise engaged on the work of such Hearing Board, shall be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law, (5 U.S.C. 73b-2) for persons in the Government service employed intermittently. Notice of such hearing shall be published in the *Federal Register* and given to the State water pollution control agencies, interstate agencies and municipalities involved at least 30 days prior to the date of such hearing. On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether the standards published or promulgated by the Secretary should be approved or modified and transmit its findings to the Secretary. If the Hearing Board approves the standards as published or promulgated by the Secretary, the standards shall take effect on receipt by the Secretary of the Hearing Board's recommendations. If the Hearing Board recommends modifications in the standards as published or promulgated by the Secretary, the Secretary shall promulgate revised regulations setting forth standards of water quality in accordance with the Hearing Board's recommendations which will become effective immediately upon promulgation.

(5) The discharge of matter into such interstate waters or portions thereof, which reduces the quality of such waters below the water quality standards established under this subsection (whether the matter causing or contributing to such reduction is discharged directly into such waters or reaches such waters after discharge into tributaries of such waters), is subject to abatement in accordance with the provisions of paragraph (1) or (2) of subsection (g) of this section, except that at least 180 days before any abatement action is initiated under either paragraph (1) or (2) of subsection (g) as authorized by this subsection, the Secretary shall notify the violators and other interested parties of the violation of such standards. In any suit brought under the provisions of this subsection the court shall receive in evidence a

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transcript of the proceedings of the conference and hearing provided

for in this subsection, together with the recommendations of the conference and Hearing Board and the recommendations and standards promulgated by the Secretary, and such additional evidence, including that relating to the alleged violation of the standards, as it deems necessary to a complete review of the standards and to a determination of all other issues relating to the alleged violation. The court, giving due consideration to the practicability and to the physical and economic feasibility of complying with such standards, shall have jurisdiction to enter such judgment and orders enforcing such judgment as the public interest and the equities of the case may require.

(6) Nothing in this subsection shall (A) prevent the application of this section to any case to which subsection (a) of this section would otherwise be applicable, or (B) extend Federal jurisdiction over water not otherwise authorized by this Act.

(7) In connection with any hearings under this section no witness or any other person shall be required to divulge trade secrets or secret processes.

(d) (1) Whenever requested by the Governor of any State or a State water pollution control agency, or (with the concurrence of the Governor and of the State water pollution control agency for the State in which the municipality is situated) the governing body of any municipality, the Secretary shall, if such request refers to pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (causing or contributing to such pollution) originates, give formal notification thereof to the water pollution control agency and interstate agency, if any, of the State or States where such discharge or discharges originate and shall call promptly a conference of such agency or agencies and of the State water pollution control agency and interstate agency, if any, of the State or States, if any, which may be adversely affected by such pollution. Whenever requested by the Governor of any State, the Secretary shall, if such request refers to pollution of interstate or navigable waters which is endangering the health or welfare of persons only in the requesting State in which the discharge or discharges (causing or contributing to such pollution) originate, give formal notification thereof to the water pollution control agency and interstate agency, if any, of such State and shall promptly call a conference of such agency or agencies, unless, in the judgment of the Secretary, the effect of such pollution on the legitimate uses of the waters is not of sufficient significance to warrant exercise of Federal jurisdiction under this section. The Secretary shall also call such a conference whenever, on the basis of reports, surveys, or studies, he has reason to believe that any pollution

referred to in subsection (a) and endangering the health or welfare of persons in a State other than that in which the discharge or discharges originate is occurring; or he finds that substantial economic injury results from the inability to market shellfish or shellfish products in interstate commerce because of pollution referred to in subsection (a) and action of Federal, State, or local authorities.

(2) *Wherever the Secretary, upon receipt of reports, surveys, or studies from any duly constituted international agency, has reason to believe that any pollution referred to in subsection (a) of this section which endangers the health or welfare of persons in a foreign country is occurring, and the*

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*Secretary of State requests him to abate such pollution, he shall give formal notification thereof to the State water pollution control agency of the State in which such discharge or discharges originate and to the interstate water pollution control agency, if any, and shall call promptly a conference of such agency or agencies, if he believes that such pollution is occurring in sufficient quantity to warrant such action. The Secretary, through the Secretary of State, shall invite the foreign country which may be adversely affected by the pollution to attend and participate in the conference, and the representative of such country shall, for the purpose of the conference and any further proceeding resulting from such conference, have all the rights of a State water pollution control agency. This paragraph shall apply only to a foreign country which the Secretary determines has given the United States essentially the same rights with respect to the prevention and control of water pollution occurring in that country as is given that country by this paragraph. Nothing in this paragraph shall be construed to modify, amend, repeal, or otherwise affect the provision of the 1909 Boundary Waters Treaty between Canada and the United States relative to the control and abatement of water pollution in waters covered by that treaty.*

[(2)] (3) The agencies called to attend such conference may bring such persons as they desire to the conference. *In addition, it shall be the responsibility of the chairman of the conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference. Not less than three weeks' prior notice of the conference date shall be given to such agencies.*

[(3)] (4) Following this conference, the Secretary shall prepare and forward to all the water pollution control agencies attending the conference a summary of conference discussions including (A) occurrence of pollution of interstate or navigable waters subject to abate-

ment under this Act; (B) adequacy of measures taken toward abatement of the pollution; and (C) nature of delays, if any, being encountered in abating the pollution.

(e) If the Secretary believes, upon the conclusion of the conference or thereafter, that effective progress toward abatement of such pollution is not being made and that the health or welfare of any persons is being endangered, he shall recommend to the appropriate State water pollution control agency that it take necessary remedial action. The Secretary shall allow at least six months from the date he makes such recommendations for the taking of such recommended action.

(f) If, at the conclusion of the period so allowed, such remedial action has not been taken or action which in the judgment of the Secretary is reasonably calculated to secure abatement of such pollution has not been taken, the Secretary shall call a public hearing, to be held in or near one or more of the places where the discharge or discharges causing or contributing to such pollution originated, before a Hearing Board of five or more persons appointed by the Secretary. Each State in which any discharge causing or contributing to such pollution originates and each State claiming to be adversely affected by such pollution shall be given an opportunity to select one member of the Hearing Board and at least one member shall be a representative of the Department of Commerce, and not less than a majority of the Hearing Board shall be persons other than officers or employees of the Department of Health, Education, and Welfare. At least three

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weeks' prior notice of such hearing shall be given to the State water pollution control agencies and interstate agencies, if any, called to attend the aforesaid hearing and the alleged polluter or polluters. On the basis of the evidence presented at such hearing, the Hearing Board shall make findings as to whether pollution referred to in subsection (a) is occurring and whether effective progress toward abatement thereof is being made. If the Hearing Board finds such pollution is occurring and effective progress toward abatement thereof is not being made it shall make recommendations to the Secretary concerning the measures, if any, which it finds to be reasonable and equitable to secure abatement of such pollution. The Secretary shall send such findings and recommendations to the person or persons discharging any matter causing or contributing to such pollution, together with a notice specifying a reasonable time (not less than six months) to secure abatement of such pollution, and shall also send such findings and recommendations and such notice to the State water pollution control agency and to the interstate agency, if any, of the State or States where such discharge or discharges originate.

(g) If action reasonably calculated to secure abatement of the pollution within the time specified in the notice following the public hearing is not taken, the Secretary—

(1) in the case of pollution of waters which is endangering the health or welfare of persons in a State other than that in which the discharge or discharges (causing or contributing to such pollution) originate, may request the Attorney General to bring a suit on behalf of the United States to secure abatement of pollution, and

(2) in the case of pollution of waters which is endangering the health or welfare of persons only in the State in which the discharge or discharges (causing or contributing to such pollution) originate, may, with the written consent of the Governor of such State, request the Attorney General to bring a suit on behalf of the United States to secure abatement of the pollution.

(h) The court shall receive in evidence in any such suit a transcript of the proceedings before the Board and a copy of the Board's recommendations and shall receive such further evidence as the court in its discretion deems proper. The court, giving due consideration to the practicability and to the physical and economic feasibility of securing abatement of any pollution proved, shall have jurisdiction to enter such judgment, and orders enforcing such judgment, as the public interest and the equities of the case may require.

(i) Members of any Hearing Board appointed pursuant to subsection (f) who are not regular full-time officers or employees of the United States shall, while participating in the hearing conducted by such Board or otherwise engaged on the work of such Board, be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(j) As used in this section the term—

(1) "person" includes an individual, corporation, partnership, association, State, municipality, and political subdivision of a State, and

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(2) "municipality" means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law.

(k) (1) *In connection with any conference called under this section the Secretary is authorized to require any person whose alleged*



*activities result in discharges causing or contributing to water pollution, or whose activities may affect the quality of the waters involved in such conference, to file with him, in such form as he may prescribe, a report, based on existing data, furnishing such information as may reasonably be required as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. After such conference has been held, the Secretary shall require such additional reports to the extent recommended by such conference. Such report shall be made under oath or otherwise, as the Secretary may prescribe, and shall be filed with the Secretary within such reasonable period as the Secretary may prescribe, unless additional time be granted by the Secretary. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.*

*(2) If any person required to file any report under this subsection shall fail to do so within the time fixed by the Secretary for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of \$100 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business: Provided, That the Secretary may upon application therefor remit or mitigate any forfeiture provided for under this subsection and he shall have authority to determine the facts upon all such applications.*

*(3) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.*

SEC. 11. It is hereby declared to be the intent of the Congress that any Federal department or agency having jurisdiction over any building, installation, or other property shall, insofar as practicable and consistent with the interests of the United States and within any available appropriations, cooperate with the Department of Health, Education, and Welfare, and with any State or interstate agency or municipality having jurisdiction over waters into which any matter is discharged from such property, in preventing or controlling the pollution of such waters. In his summary of any conference pursuant to section 10 (d) (3) of this Act, the Secretary shall include references to any discharges allegedly contributing to pollution from any Federal property. Notice of any hearing pursuant to section 10 (f) involving any pollution alleged to be effected by any such discharges shall also

be given to the Federal agency having jurisdiction over the property involved and the findings and recommendations of the Hearing Board conducting such hearing shall also include references to any such discharges which are contributing to the pollution found by such Hearing Board.

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SEC. 12. (a) The Secretary is authorized to prescribe such regulations as are necessary to carry out his functions under this Act.

(b) The Secretary, with the consent of the head of any other agency of the United States, may utilize such officers and employees of such agency as may be found necessary to assist in carrying out the purposes of this Act.

(c) There are hereby authorized to be appropriated to the Department of Health, Education, and Welfare such sums as may be necessary to enable it to carry out its functions under this Act.

(d) Each recipient of assistance under this Act shall keep such records as the Secretary shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project or undertaking in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

(e) The Secretary of Health, Education, and Welfare and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants received under this Act.

#### DEFINITIONS

SEC. 13. When used in this Act—

(a) The term "State water pollution control agency" means the State health authority, except that, in the case of any State in which there is a single State agency, other than the State health authority, charged with responsibility for enforcing State laws relating to the abatement of water pollution, it means such other State agency.

(b) The term "interstate agency" means an agency of two or more States established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution of waters.

(c) The term "treatment works" means the various devices

used in the treatment of sewage or industrial wastes of a liquid nature, including the necessary intercepting sewers, outfall sewers, pumping, power, and other equipment, and their appurtenances, and includes any extensions, improvements, remodeling, additions, and alterations thereof.

(d) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, and Guam.

(e) The term "interstate waters" means all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters.

(f) The term "municipality" means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.

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#### OTHER AUTHORITY NOT AFFECTED

SEC. 14. This Act shall not be construed as (1) superseding or limiting the functions, under any other law, of the Surgeon General or of the Public Health Service, or of any other officer or agency of the United States, relating to water pollution, or (2) affecting or impairing the provisions of the Oil Pollution Act, 1924, or sections 13 through 17 of the Act entitled "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors and for other purposes", approved March 3, 1899, as amended, or (3) affecting or impairing the provisions of any treaty of the United States.

#### SEPARABILITY

SEC. 15. If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

#### SHORT TITLE

SEC. 16. This Act may be cited as the "Federal Water Pollution Control Act".

#### COST ESTIMATE AND STUDY

*Sec. 17. In order to provide the basis for evaluating programs authorized by this Act, the development of new programs, and to furnish the Congress with the information necessary for authorization of appropriations for fiscal years beginning after June 30, 1972, the Secretary, in cooperation with State water pollution control agencies*

and other water pollution control planning agencies, shall make a detailed estimate of the cost of carrying out the provisions of this Act; a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and a comprehensive analysis of the national requirements for and cost of treating municipal, industrial, and other effluent to attain such water quality standards as established pursuant to this Act or applicable State law. The Secretary shall submit such detailed estimate and such comprehensive study of such cost for the five-year period beginning July 1, 1968, to the Congress no later than January 10, 1968, such study to be updated each year thereafter.

#### STUDY OF POLLUTION FROM BOATS AND VESSELS

Sec. 18. (a) For the purpose of protecting the public health and welfare, the Secretary, in consultation with the Secretary of the Army, the Secretary of the department in which the Coast Guard is operating, the Secretary of Health, Education, and Welfare, and the Secretary of Commerce, shall conduct a study of the extent of pollution from boats and vessels on such part of the Great Lakes as is under the jurisdiction of the United States, in harbors or ports of such lakes under such jurisdiction and on other navigable waters of the United States, and shall report the results of such study, together with recommendations for an effective program to control the dumping of refuse and the discharge of waste from boats and vessels on such waters, to the Congress no later than July 1, 1967.

(b) The Secretary shall appoint a technical committee to meet at his discretion and advise in the formulation of recommendations pursuant to

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this section. Such committee shall be composed of representatives of the Departments of the Interior, Health, Education, and Welfare, the Army, and Commerce, the department in which the Coast Guard is operating, owners and operators of Great Lakes vessels, and such other persons as the Secretary may determine. Members of such technical committee who are not regular full-time employees of the United States shall, while attending meetings of such committee or otherwise engaged on business of such committee, be entitled to receive compensation at a rate fixed by the Secretary, but not exceeding \$100 per diem, including travel time, and, while so serving away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5 of the Administrative Expenses

Act of 1946 (5 U.S.C. 73b-2) for persons in the Government service employed intermittently.

(c) For the purposes of this section the term—

- (1) “Waste” includes human toilet waste, wash and laundry waste, and kitchen and galley waste; and
- (2) “refuse” includes garbage, dunnage, and other trash.

## TITLE II—CLEAN RIVERS RESTORATION PROGRAM

### SHORT TITLE

Sec. 201. This title may be cited as the “Clean Rivers Restoration Act of 1966”.

### STATEMENT OF PURPOSE

Sec. 202. It is the purpose of this title to authorize pollution control and abatement programs designed to reclaim, restore, and maintain the natural waters of the Nation through the preparation and development of comprehensive river basin pollution control and abatement plans and through the establishment of economic incentives to encourage waste treatment consistent with water quality standards effected as a result of section 10 (c) of this Act.

### PLANNING AGENCIES

Sec. 203. In furtherance of the purposes of this title, the Secretary shall, at the request of the Governor or Governors of one or more States, designate a planning agency which provides for adequate representation of appropriate Federal, State, interstate, local, or when appropriate, international interests in the river basin or portion thereof involved and which is capable of developing an effective, comprehensive water quality control and abatement plan that is part of or consistent with a comprehensive river basin water resources plan.

### COMPREHENSIVE RIVER BASIN PLANS

Sec. 204. Each planning agency designated pursuant to section 203 of this title shall develop a comprehensive pollution control and abatement plan which is part of or consistent with a comprehensive river basin water resources plan and which—

- (1) is consistent with any water quality standards established for interstate waters within the river basin pursuant to section 10 (c) of this Act;
- (2) recommends such treatment works and sewer systems as will provide the most effective and economical means of collection,

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*storage, treatment, and purification of wastes and provides means to encourage both municipal and industrial use of such works and systems; and*

*(3) provides for maintenance and improvement of water quality standards within the basin or portion thereof and includes proposed methods of adequately financing those facilities as may be necessary to implement the plan.*

#### SUBMISSION OF PLAN

*Sec. 205. Upon completion of a proposed comprehensive pollution control and abatement plan or portion thereof, each planning agency shall transmit the plan to the Governor of each State, each interstate agency, international commission, and each local agency covered by the plan or portion thereof. Each such Governor, agency, or commission shall have sixty days from the date of the receipt of the proposed plan to submit views, comments, and recommendations. The planning agency shall consider such views, comments, and recommendations and may make appropriate changes or modifications in the proposed plan. The planning agency shall then submit the proposed plan to the Secretary together with the views, comments, and recommendations of each such Governor, agency, or commission.*

#### REVIEW WITHIN FEDERAL GOVERNMENT

*Sec. 206. (a) Upon receipt of a proposed comprehensive pollution control and abatement plan or portion thereof from a planning agency, the Secretary shall transmit it to the Secretary of Health, Education, and Welfare, the Secretary of Housing and Urban Development, the Water Resources Council, and, when appropriate, the Secretary of State, for review.*

*(b) The Secretary of Health, Education, and Welfare, the Secretary of Housing and Urban Development, the Water Resources Council, and the Secretary of State, shall notify the Secretary of the Interior, within sixty days, of the results of their review.*

*(c) The Secretary shall review the plan or portion thereof and the recommendations received under subsection (b) and under section 205, and, if he determines that the plan or portion thereof adequately and effectively complies with section 204 of this Act, he shall approve the plan or portion thereof.*

#### GRANT PROGRAM FOR TREATMENT WORKS

*Sec. 207. After designation of an appropriate planning agency for any river basin or portion thereof, the Secretary may accept applications from and make grants to local, State, or interstate agencies from such funds as may be appropriated pursuant to section 8 of this Act to*

assist in financing construction of treatment works within such river basin or portion thereof subject to the following limitations:

(1) the amount of the grant shall not exceed 50 per centum of the estimated reasonable construction costs of such treatment works;

(2) no application for a grant shall be approved until the Secretary determines that the proposed project (a) is consistent with and carries out the purpose of this title, (b) will be properly and efficiently operated and maintained, (c) is designed so that an ade-

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quate capacity will be available to serve the reasonably foreseeable growth need of the area, (d) when located, in whole or in part, in urbanized areas, meets any requirements with respect to planning and programing as have been prescribed by the Secretary of Housing and Urban Development with respect to water and sewer projects under title VII of the Housing and Urban Development Act of 1965, and (e) provides, when appropriate, for joint waste treatment;

(3) no grants shall be available to assist in financing the construction of any such works which are receiving a Federal grant under other provisions of law, except the Appalachian Regional Development Act of 1965 or title I of the Public Works and Economic Development Act of 1965;

(4) no application for a grant shall be approved unless the Governor of the State in which the project is located provides satisfactory assurance that statewide water quality standards consistent with section 10 (c) of this Act are in effect or will be established in such State;

(5) no application for a grant shall be approved unless the State in which the project is located agrees to provide not less than 30 per centum of the estimated total project cost; and

(6) no application for a grant shall be approved for any project in such river basin or portion thereof after three years following the date of designation of such planning agency unless such project is in conformance with a plan approved pursuant to section 206 (c).

#### LABOR STANDARDS

Sec. 208. The Secretary shall take such action as may be necessary to insure that all laborers and mechanics employed by contractors or subcontractors on projects for which grants are made under section 207 shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the locality, as deter-

mined by the Secretary of Labor, in accordance with the Act of March 3, 1931, as amended, known as the Davis-Bacon Act (46 Stat. 1494; 40 U.S.C. 276a—276a-5). The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14, 1950 (15 F.R. 3176; 64 Stat. 1267; 5 U.S.C. 133z-15), and section 2 of the Act of June 13, 1934, as amended (48 Stat. 948; 40 U.S.C. 276c).

#### APPROVAL OF GRANTS FROM OTHER AGENCIES

*Sec. 209.* After the Secretary approves a comprehensive pollution control and abatement plan or portion thereof for a river basin or portion thereof, an application for a grant to assist in financing the construction of treatment works in such basin or portion thereof made under any other provision of law shall not be approved by the head of any other Federal agency, by the Appalachian Regional Commission or other regional commissions established pursuant to the Public Works and Economic Development Act of 1965 unless it substantially conforms, in the judgment of the Secretary, to such plan.

#### AUTHORIZATION OF PLANNING EXPENSES

*Sec. 210.* (a) In carrying out the provisions of section 204 of this Act, the Secretary is authorized to pay such expenses of each planning agency as are necessary to implement formulation of the plan. Each

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planning agency shall prepare a budget annually and transmit it to the Secretary.

(b) There are authorized to be appropriated such funds as may be necessary to carry out the provisions of this section, which sums shall be available until expended.

#### DEFINITIONS

*Sec. 211.* For the purposes of this title—

(1) the term “planning agency” includes, but is not limited to, interstate agencies, or commissions established by or pursuant to an agreement or compact approved by the Congress;

(2) the term “local, State, or interstate agencies” includes agencies of States, municipalities, and other political subdivisions of a State, public corporate bodies, public agencies and instrumentalities of one or more States, Indian tribes, conservancy districts, interstate agencies, or commissions established by or pursuant to an agreement or compact approved by the Congress;

(3) the term “construction” includes preliminary planning to determine the economic and engineering feasibility of treatment works, the engineering, architectural, legal, fiscal, and economic



*investigations and studies, surveys, designs, plans, working drawings, specifications, procedures, and other action necessary to the construction of treatment works; and the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works; and the inspection and supervision of the construction of treatment works; and*

(4) *the term "river basin" includes, but is not limited to, land areas drained by a river and its tributaries, streams, coastal waters, estuaries, bays, and lakes.*

#### OTHER AUTHORITY NOT AFFECTED

*Sec. 212. Nothing in this title shall be construed to displace, supersede, limit, or modify any interstate compact or the jurisdiction or responsibility of any legally established joint or common agency of two or more States, or two or more States and the Federal Government or to affect the jurisdiction, powers, or prerogatives of the International Joint Commission, United States and Canada, the Permanent Engineering Board and the United States operating entity or entities established pursuant to the Columbia River Basin Treaty, signed at Washington, January 17, 1961, or the International Boundary and Water Commission, United States and Mexico.*

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#### RIVER AND HARBOR ACT OF MARCH 3, 1899

(30 Stat. 1152; 33 U.S.C. 407)

**SEC. 13.** That it shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be

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washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer, or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise, whereby navigation shall or may be impeded or obstructed: *Provided*, That nothing herein

contained shall extend to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the United States officers supervising such improvement or public work: *And provided further*, That the Secretary of War, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, *and whenever the Secretary of the Interior determines that it is consistent with the purposes of the Federal Water Pollution Control Act (33 U.S.C. 466 et seq.)*, may permit the deposit of any material above mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful.

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#### OIL POLLUTION ACT OF 1924

(43 Stat. 604; 33 U.S.C. 431 et seq.)

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, [That this Act may be cited as the "Oil Pollution Act, 1924."

[SEC. 2. When used in this Act, unless the context otherwise requires—

[(a) The term "oil" means oil of any kind or in any form, including fuel oil, oil sludge, and oil refuse;

[(b) The term "person" means an individual, partnership, corporation, or association; any owner, master, officer, or employee of a vessel; and any officer, agent, or employee of the United States;

[(c) The term "coastal navigable waters of the United States" means all portions of the sea within the territorial jurisdiction of the United States, and all inland waters navigable in fact in which the tide ebbs and flows;

[(d) The term "Secretary" means the Secretary of War.

[SEC. 3. That, except in case of emergency imperiling life or property, or unavoidable accident, collision, or stranding, and except as otherwise permitted by regulations prescribed by the Secretary as hereinafter authorized, it shall be unlawful for any person to discharge, or suffer, or permit the discharge of oil by any method, means, or manner into or upon the coastal navigable waters of the United States from any vessel using oil as fuel for the generation of propulsion power, or any vessel carrying or having oil thereon in excess of that necessary for its lubricating requirements and such as may be required under the laws of the United States and the rules and regula-

tions prescribed thereunder. The Secretary is authorized and empowered to prescribe regulations permitting the discharge of oil from vessels in such quanti-

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ties, under such conditions, and at such times and places as in his opinion will not be deleterious to health or sea food, or a menace to navigation, or dangerous to persons or property engaged in commerce on such waters, and for the loading, handling, and unloading of oil.

[SEC. 4. That any person who violates section 3 of this Act, or any regulation prescribed in pursuance thereof, is guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding \$2,500 nor less than \$500, or by imprisonment not exceeding one year nor less than thirty days, or by both such fine and imprisonment, for each offense. And any vessel (other than a vessel owned and operated by the United States) from which oil is discharged in violation of section 3 of this Act, or any regulation prescribed in pursuance thereof, shall be liable for the pecuniary penalty specified in this section, and clearance of such vessel from a port of the United States may be withheld until the penalty is paid, and said penalty shall constitute a lien on such vessel which may be recovered in proceedings by libel in rem in the district court of the United States for any district within which the vessel may be.

[SEC. 5. A board of local inspectors of vessels may, subject to the provisions of section 4450 of the Revised Statutes, and of the Act entitled "An Act to provide for appeals from decisions of local inspectors of vessels, and for other purposes," approved June 10, 1918, suspend or revoke a license issued by any such board to the master or other licensed officer of any vessel found violating the provisions of section 3 of this Act.

[SEC. 6. That no penalty, or the withholding of clearance, or the suspension or revocation of licenses, provided for herein, shall be enforced for any violation of this Act occurring within three months after its passage.

[SEC. 7. That in the administration of this Act the Secretary may make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel, employed under his direction in the improvement of rivers and harbors, and in the enforcement of existing laws for the preservation and protection of navigable waters. And for the better enforcement of the provisions of this Act, the officers and agents of the United States in charge of river and harbor improvements, and the assistant engineers and inspectors employed under them by authority of the Secretary, and officers of the Customs and Coast Guard Service of the United States, shall have

power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of said provisions: *Provided*, That no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid officials: *And provided further*, That whenever any arrest is made under the provisions of this Act the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him; and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.

[SEC. 8. That this Act shall be in addition to the existing laws for the preservation and protection of navigable waters and shall not be construed as repealing, modifying, or in any manner affecting the provisions of those laws.

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[SEC. 9. That the Secretary is authorized and directed to make such investigation as may be necessary to ascertain what polluting substances are being deposited into the navigable waters of the United States, or into nonnavigable waters connecting with navigable waters, to such an extent as to endanger or interfere with navigation or commerce upon such navigable waters or the fisheries therein; and with a view to ascertaining the sources of such pollutions and by what means they are deposited; and the Secretary shall report the results of his investigation to the Congress not later than two years after the passage of this Act, together with such recommendations for remedial legislation as he deems advisable: *Provided*, That funds appropriated for examinations, surveys, and contingencies of rivers and harbors may be applied to paying the cost of this investigation, and, to adequately provide therefore, the additional sum of not to exceed \$50,000 is hereby authorized to be appropriated for examinations, surveys, and contingencies of rivers and harbors.]

*That this Act may be cited as the "Oil Pollution Act, 1924".*

*Sec. 2. When used in this Act, unless the context otherwise requires—*

(a) "oil" means oil of any kind or in any form, including fuel oil, sludge, and oil refuse;

(b) "person" means an individual, company, partnership, corporation, or association; any owner, operator, master, officer, or employee of a vessel; any owner, operator, officer, or employee of a shore installation or terminal facility; and any officer, agent, or employee of the United States;

(c) "terminal facility" means any pier, wharf, dock, or similar

structure to which a vessel may be moored or secured, or upon, within, or contiguous to which equipment and appurtenances dealing with oil may be located, including, but not limited to, storage tanks, pipelines, pumps, and oil trucks;

(d) "shore installation" means any building, group of buildings, manufacturing or industrial plants, or equipment of any kind adjacent to the coastal, interstate, or navigable waters, and adjoining shorelines of the United States, upon, within, or contiguous to which equipment and appurtenances dealing with oil may be located, including, but not limited to, storage tanks, pipelines, pumps, and oil trucks;

(e) "discharge" means any accidental, negligent, or willful spilling, leaking, pumping, pouring, emitting, emptying, or other release of liquid; and

(f) "Secretary" means the Secretary of the Interior.

Sec. 3. (a) Except in case of emergency imperiling life or property, or unavoidable accident, collision, or stranding, and except as otherwise permitted by regulations prescribed by the Secretary as hereinafter authorized, it is unlawful for any person to discharge or permit the discharge from any boat, vessel, shore installation, or terminal facility of oil by any method, means, or manner into or upon the coastal, interstate, or navigable waters, and adjoining shorelines of the United States.

(b) Any person discharging or permitting the discharge of oil from any boat, vessel, shore installation, or terminal facility into or upon the coastal, interstate, or navigable waters of the United States shall remove the same from the coastal, interstate, or navigable waters, and adjoining shorelines immediately. If such person fails to do so, the Secretary may remove the oil or may arrange for its removal, and such person shall be

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liable to the United States, in addition to the penalties prescribed in section 4 of this Act, for all costs and expenses reasonably incurred by the Secretary in removing the oil from the coastal, interstate, or navigable waters, and adjoining shorelines of the United States. When the oil has been discharged from a boat or vessel, these costs and expenses shall constitute a lien on such vessel which may be recovered in proceedings by libel in rem. When the oil has been discharged from a shore installation or terminal facility, these costs and expenses may be recovered in proceedings by libel in personam.

(c) The Secretary may prescribe regulations which—

(1) permit the discharge of oil from boats or vessels in such quantities, under such conditions, and at such times and places as in his opinion will not be deleterious to health or marine life or a

*menace to navigation, or dangerous to persons or property engaged in commerce on coastal, interstate, or navigable waters;*

*(2) relate to the loading, handling, and unloading of oil on or contiguous to boats or vessels, shore installations, and terminal facilities; and*

*(3) relate to the removal or cost of removal, or both, of oil from the coastal, interstate, or navigable waters, and adjoining shoreline of the United States.*

Sec. 4. (a) Any person who violates section 3 (a) of this Act shall, upon conviction thereof, be punished by a fine not exceeding \$2,500, or by imprisonment not exceeding one year, or by both such fine and imprisonment for each offense.

(b) Any boat or vessel other than a boat or vessel owned and operated by the United States from which oil is discharged in violation of section 3 (a) of this Act shall be liable for a penalty of not more than \$10,000. Clearance of a boat or vessel liable for this penalty from a port of the United States may be withheld until the penalty is paid. The penalty shall constitute a lien on the boat or vessel which may be recovered in proceedings by libel in rem in the district court of the United States for any district within which the boat or vessel may be.

(c) The owner or operator of a shore installation or terminal facility from which oil is discharged in violation of section 3 (a) of this Act shall be liable for a penalty of not more than \$10,000 which may be recovered in proceedings by libel in personam in the district court of the United States of the district within which the shore installation or terminal facility is located.

(d) Any person who violates any regulation prescribed under section 3 (c) of this Act shall, if there has been no discharge of oil, be liable for a penalty of not more than \$100.

Sec. 5. The Commandant of the Coast Guard may, subject to the provisions of section 4450 of the Revised Statutes, as amended (46 U.S.C. 239), suspend or revoke a license issued to the master or other licensed officer of any boat or vessel found violating the provisions of section 3 of this Act.

Sec. 6. In the administration of this Act the Secretary may, with the consent of the Commandant of the Coast Guard or the Secretary of the Army, make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel, employed by the Coast Guard or the Department of the Army, respectively, for the preservation and protection of interstate or navigable waters. And for better enforcement of the provisions of this Act, the officers and agents of the United States

*in charge of river and harbor improvements, and persons employed under them by authority of the Secretary of the Army, and persons employed by the Secretary, and officers of the Customs and Coast Guard of the United States shall have the power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of said provisions: Provided, That no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid persons: And provided further, That whenever any arrest is made under the provisions of this Act the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.*

*Sec. 7. This Act shall be in addition to other laws for the preservation and protection of interstate or navigable waters and shall not be construed as repealing, modifying, or in any manner affecting the provisions of such laws.*

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### 1.2j(3) COMMITTEE OF CONFERENCE

H.R. REP. No. 2289, 89th Cong., 2d Sess. (1966)<sup>1</sup>

#### CLEAN WATERS RESTORATION ACT OF 1966

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OCTOBER 15, 1966.—Ordered to be printed

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Mr. BLATNIK, from the committee of conference, submitted the following

#### CONFERENCE REPORT

[To accompany S. 2947]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 2947) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act, having

met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following:

*That this Act may be cited as the "Clean Waters Restoration Act of 1966".*

#### TITLE I

Sec. 101. Section 3 of the Federal Water Pollution Control Act, as amended, is amended by adding at the end thereof the following:

"(c) (1) The Secretary shall, at the request of the Governor of a State, or a majority of the governors when more than one State is involved, make a grant to pay not to exceed 50 per centum of the administrative expenses of a planning agency for a period not to exceed 3 years, if such agency provides for adequate representation of appropriate State, interstate, local, or (when appropriate) international, interests in the basin or portion thereof involved and is capable of developing an effective, comprehensive water quality control and abatement plan for a basin.

"(2) Each planning agency receiving a grant under this subsection shall develop a comprehensive pollution control and abatement plan for the basin which—

"(A) is consistent with any applicable water quality standards established pursuant to current law within the basin;

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"(B) recommends such treatment works and sewer systems as will provide the most effective and economical means of collection, storage, treatment, and purification of wastes and recommends means to encourage both municipal and industrial use of such works and systems; and

"(C) recommends maintenance and improvement of water quality standards within the basin or portion thereof and recommends methods of adequately financing those facilities as may be necessary to implement the plan.

"(3) For the purposes of this subsection the term 'basin' includes, but is not limited to, rivers and their tributaries, streams, coastal waters, sounds, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby."

#### TITLE II

Sec. 201. (a) Section 6 of the Federal Water Pollution Control Act is amended to read as follows:



“GRANTS FOR RESEARCH AND DEVELOPMENT

“Sec. 6. (a) *The Secretary is authorized to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of—*

*“(1) assisting in the development of any project which will demonstrate a new or improved method of controlling the discharge into any waters of untreated or inadequately treated sewage or other wastes from sewers which carry storm water or both storm water and sewage or other wastes, or*

*“(2) assisting in the development of any project which will demonstrate advanced waste treatment and water purification methods (including the temporary use of new or improved chemical additives which provide substantial immediate improvement to existing treatment processes) or new or improved methods of joint treatment systems for municipal and industrial wastes, and for the purpose of reports, plans, and specifications in connection therewith.*

*“(b) The Secretary is authorized to make grants to persons for research and demonstration projects for prevention of pollution of waters by industry including, but not limited to, treatment of industrial waste.*

*“(c) Federal grants under subsection (a) of this section shall be subject to the following limitations:*

*“(1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary;*

*“(2) No grant shall be made for any project in an amount exceeding 75 per centum of the estimated reasonable cost thereof as determined by the Secretary; and*

*“(3) No grant shall be made for any project under this section unless the Secretary determines that such project will serve as a useful demonstration for the purpose set forth in clause (1) or (2) of subsection (a).*

*“(d) Federal grants under subsection (b) of this section shall be subject to the following limitations:*

*“(1) No grant shall be made under this section in excess of \$1,000,000;*

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*“(2) No grant shall be made for more than 70 per centum of the cost of the project; and*

*“(3) No grant shall be made for any project unless the Secretary determines that such project will serve a useful purpose in*

the development or demonstration of a new or improved method of treating industrial wastes or otherwise preventing pollution of waters by industry, which method shall have industry-wide application.

“(e) For the purposes of this section there are authorized to be appropriated—

“(1) for the fiscal year ending June 30, 1966, and for each of the next three succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purposes set forth in subsections (a) and (b) of this section, including contracts pursuant to such subsections for such purposes;

“(2) for the fiscal year ending June 30, 1967, and for each of the next two succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in clause (2) of subsection (a); and

“(3) for the fiscal year ending June 30, 1967, and for each of the next two succeeding fiscal years, the sum of \$20,000,000 per fiscal year for the purpose set forth in subsection (b).”

(b) Section 5 of such Act is amended by adding at the end thereof the following new subsections:

“(g) (1) The Secretary shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources Council, and with other appropriate Federal, State, interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, and encourage contributions to, a comprehensive study of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such study shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones upon the pollution of the waters therein.

“(2) In conducting the above study, the Secretary shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones; and identify the problems and areas where further research and study are required.

“(3) The Secretary shall submit to the Congress a final report of the study authorized by this subsection not later than three years after the date of enactment of this subsection. Copies of the report shall be made available to all interested parties, public and private. The report shall include, but not be limited to—

“(A) an analysis of the importance of estuaries to the economic and social well-being of the people of the United States and of the effects of population upon the use and enjoyment of such estuaries;

“(B) a discussion of the major economic, social, and ecological trends occurring in the estuarine zones of the Nation;

“(C) recommendations for a comprehensive national program for the preservation, study, use, and development of estuaries of the Nation, and the respective responsibilities which should be assumed

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by Federal, State, and local governments and by public and private interests.

“(4) There is authorized to be appropriated the sum of \$1,000,000 per fiscal year for the fiscal years ending June 30, 1967, June 30, 1968, and June 30, 1969, to carry out the purposes of this subsection.

“(5) For the purpose of this subsection, the term ‘estuarine zones’ means an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and the term ‘estuary’ means all or part of the mouth of a navigable or interstate river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.

“(h) There is authorized to be appropriated to carry out this section, other than subsection (g), not to exceed \$60,000,000 for the fiscal year ending June 30, 1968, and \$65,000,000 for the fiscal year ending June 30, 1969. Sums so appropriated shall remain available until expended.”

(c) (1) Subsection (d) of section 5 of the Federal Water Pollution Control Act is amended by striking out “(1)” and by striking out all of paragraph (2) of such subsection.

(2) The amendment made by this subsection shall take effect July 1, 1967.

Sec. 202. (a) Subsection (a) of section 7 of the Federal Water Pollution Control Act is amended by striking out “and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000” and inserting in lieu thereof “for each succeeding fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1971, \$10,000,000”.

(b) Subsection (a) of section 7 of the Federal Water Pollution Control Act is further amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: "including the training of personnel of public agencies."

Sec. 203. (a) Subsection (b) of section 8 of the Federal Water Pollution Control Act is amended to read as follows:

"(b) Federal grants under this section shall be subject to the following limitations: (1) No grant shall be made for any project pursuant to this section unless such project shall have been approved by the appropriate State water pollution control agency or agencies and by the Secretary and unless such project is included in a comprehensive program developed pursuant to this Act; (2) no grant shall be made for any project in an amount exceeding 30 per centum of the estimated reasonable cost thereof as determined by the Secretary; (3) no grant shall be made unless the grantee agrees to pay the remaining cost; (4) no grant shall be made for any project under this section until the applicant has made provision satisfactory to the Secretary for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof; and (5) no grant shall be made for any project under this section unless such project is in conformity with the State water pollution control plan submitted pursuant to the provisions of section 7 and has been certified by the appropriate State water pollution control agency as entitled to priority over other eligible projects on the basis of financial as well as water pollution control needs; (6) the percentage limitation of 30 per centum imposed by clause (2) of this subsection shall be increased to a

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maximum of 40 per centum in the case of grants made under this section from funds allocated for a fiscal year to a State under subsection (c) of this section if the State agrees to pay not less than 30 per centum of the estimated reasonable cost (as determined by the Secretary) of all projects for which Federal grants are to be made under this section from such allocation; (7) the percentage limitations imposed by clause (2) of this subsection shall be increased to a maximum of 50 per centum in the case of grants made under this section from funds allocated for a fiscal year to a State under subsection (c) of this section if the State agrees to pay not less than 25 per centum of the estimated reasonable costs (as determined by the Secretary) of all projects for which Federal grants are to be made under this section from such allocation and if enforceable water quality standards have been established for the waters into which the project discharges, in accordance with section 10 (c) of this Act in the

case of interstate waters, and under State law in the case of intrastate waters.

(b) The amendment made by subsection (a) of this section shall take effect July 1, 1967.

Sec. 204. The next to the last sentence of subsection (c) of section 8 of the Federal Water Pollution Control Act is amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: "except that in the case of any project on which construction was initiated in such State after June 30, 1966, which was approved by the appropriate State water pollution control agency and which the Secretary finds meets the requirements of this section but was constructed without such assistance, such allotments for any fiscal year ending prior to July 1, 1971, shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1971, to the extent that assistance could have been provided under this section if such project had been approved pursuant to this section and adequate funds had been available. In the case of any project on which construction was initiated in such State after June 30, 1966, and which was constructed with assistance pursuant to this section but the amount of such assistance was a lesser per centum of the cost of construction than was allowable pursuant to this section, such allotments shall also be available for payments in reimbursement of State or local funds used for such project prior to July 1, 1971, to the extent that assistance could have been provided under this section if adequate funds had been available. Neither a finding by the Secretary that a project meets the requirements of this subsection, nor any other provision of this subsection, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for such project."

Sec. 205. Subsection (d) of section 8 of the Federal Water Pollution Control Act is amended by striking out "and \$150,000,000 for the fiscal year ending June 30, 1967." and inserting in lieu thereof the following: "\$150,000,000 for the fiscal year ending June 30, 1967; \$450,000,000 for the fiscal year ending June 30, 1968; \$700,000,000 for the fiscal year ending June 30, 1969; \$1,000,000,000 for the fiscal year ending June 30, 1970; and \$1,250,000,000 for the fiscal year ending June 30, 1971."

Sec. 206. Section 10(d) of the Federal Water Pollution Control Act is amended by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively, and by inserting immediately after paragraph (1) the following new paragraph:

"(2) Whenever the Secretary, upon receipt of reports, surveys, or studies from any duly constituted international agency, has reason to

believe that any pollution referred to in subsection (a) of this section which

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endangers the health or welfare of persons in a foreign country is occurring, and the Secretary of State requests him to abate such pollution, he shall give formal notification thereof to the State water pollution control agency of the State in which such discharge or discharges originate and to the interstate water pollution control agency, if any, and shall call promptly a conference of such agency or agencies, if he believes that such pollution is occurring in sufficient quantity to warrant such action. The Secretary, through the Secretary of State, shall invite the foreign country which may be adversely affected by the pollution to attend and participate in the conference, and the representative of such country shall, for the purpose of the conference and any further proceeding resulting from such conference, have all the rights of a State water pollution control agency. This paragraph shall apply only to a foreign country which the Secretary determines has given the United States essentially the same rights with respect to the prevention and control of water pollution occurring in that country as is given that country by this paragraph. Nothing in this paragraph shall be construed to modify, amend, repeal, or otherwise affect the provisions of the 1909 Boundary Waters Treaty between Canada and the United States or the Water Utilization Treaty of 1944 between Mexico and the United States (59 Stat. 1219), relative to the control and abatement of water pollution in waters covered by those treaties."

Sec. 207. Section 10(d) (3) of the Federal Water Pollution Control Act (as redesignated by this Act) is amended by inserting after the first sentence thereof the following: "In addition, it shall be the responsibility of the chairman of the conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference."

Sec. 208. (a) Section 10 of the Federal Water Pollution Control Act is further amended by adding at the end thereof the following new subsection:

"(k) (1) At the request of a majority of the conferees in any conference called under this section the Secretary is authorized to request any person whose alleged activities result in discharges causing or contributing to water pollution, to file with him a report (in such form as may be prescribed in regulations promulgated by him) based on existing data, furnishing such information as may reasonably be requested as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce

such discharges by the person filing such a report. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

“(2) If any person required to file any report under this subsection shall fail to do so within the time fixed by regulations for filing the same and such failure shall continue for thirty days after notice of such default, such person may, by order of a majority of the conferees, be subject to a forfeiture of \$100 for each and every day of the continuance of such failure which forfeiture shall be payable into the Treasury of the United States and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may upon application therefor remit or mitigate any forfeiture provided for under this subsection and he shall have authority to determine the facts upon all such applications.

“(3) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.”

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(b) Subsection (f) of section 10 of the Federal Water Pollution Control Act is amended (1) by striking out “(f)” and inserting in lieu thereof “(f) (1)”, (2) by inserting immediately after the third sentence thereof the following: “It shall be the responsibility of the Hearing Board to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the Hearing Board.”, and (3) by adding at the end thereof the following new paragraphs:

“(2) In connection with any hearing called under this section the Secretary is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution to file with him, in such form as he may prescribe, a report based on existing data, furnishing such information as may reasonably be required as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such a report. Such report shall be made under oath or otherwise, as the Secretary may prescribe, and shall be filed with the Secretary within such reasonable period as the Secretary may prescribe, unless additional time be granted by the Secretary. No person shall be required in such report to divulge trade secrets or secret processes, and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

“(3) If any person required to file any report under paragraph (2) of this subsection shall fail to do so within the time fixed by the Secretary for filing the same, and such failure shall continue for thirty days after notice of such default, such person shall forfeit to the United States the sum of \$100 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary may upon application therefor remit or mitigate any forfeiture provided for under this paragraph and he shall have authority to determine the facts upon all such applications.

“(4) It shall be the duty of the various United States attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of such forfeitures.”

Sec. 209. Paragraph (f) of section 13 of the Federal Water Pollution Control Act is amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: “and an Indian tribe or an authorized Indian tribal organization.”

Sec. 210. The Federal Water Pollution Control Act, as amended, is amended by renumbering existing section 16 as section 19 and by adding immediately after section 15 the following new sections:

“Sec. 16. (a) In order to provide the basis for evaluating programs authorized by this Act, the development of new programs, and to furnish the Congress with the information necessary for authorization of appropriations for fiscal years beginning after June 30, 1968, the Secretary, in cooperation with State water pollution control agencies and other water pollution control planning agencies, shall make a detailed estimate of the cost of carrying out the provisions of this Act; a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and a comprehensive analysis of the national requirements for and the cost of treating municipal, industrial, and other effluent to attain such water quality standards as established pursuant to this Act or applicable State law. The Secretary shall submit such detailed estimate and such comprehensive study of such cost for the five-

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year period beginning July 1, 1968, to the Congress no later than January 10, 1968, such study to be updated each year thereafter.

“(b) The Secretary shall also make a complete investigation and study to determine (1) the need for additional trained State and local personnel to carry out programs assisted pursuant to this Act and other programs for the same purpose as this Act, and (2) means of



using existing Federal training programs to train such personnel. He shall report the results of such investigation and study to the President and the Congress not later than July 1, 1967.

"Sec. 17. The Secretary of the Interior shall, in consultation with the Secretary of the Army, the Secretary of the department in which the Coast Guard is operating, the Secretary of Health, Education, and Welfare, and the Secretary of Commerce, conduct a full and complete investigation and study of the extent of the pollution of all navigable waters of the United States from litter and sewage discharged, dumped, or otherwise deposited into such waters from watercraft using such waters, and methods of abating either in whole or in part such pollution. The Secretary shall submit a report of such investigation to Congress, together with his recommendations for any necessary legislation, not later than July 1, 1967.

"Sec. 18. The Secretary of the Interior shall conduct a full and complete investigation and study of methods for providing incentives designed to assist in the construction of facilities and works by industry designed to reduce or abate water pollution. Such study shall include, but not be limited to, the possible use of tax incentives as well as other methods of financial assistance. In carrying out this study the Secretary shall consult with the Secretary of the Treasury as well as the head of any other appropriate department or agency of the Federal Government. The Secretary shall report the results of such investigation and study, together with his recommendations, to the Congress not later than January 30, 1968."

Sec. 211. (a) The Oil Pollution Act, 1924 (43 Stat. 694; 33 U.S.C. 431 et seq.), is amended to read as follows: "That this Act may be cited as the 'Oil Pollution Act, 1924'.

"Sec. 2. When used in this Act, unless the context otherwise requires—

"(1) 'oil' means oil of any kind or in any form, including fuel oil, sludge, and oil refuse;

"(2) 'person' means an individual, company, partnership, corporation, or association; any owner, operator, master, officer, or employee of a vessel; and any officer, agent or employee of the United States;

"(3) 'discharge' means any grossly negligent, or willful spilling, leaking, pumping, pouring, emitting, or emptying of oil;

"(4) 'navigable waters of the United States' means all portions of the sea within the territorial jurisdiction of the United States, and all inland waters navigable in fact; and

"(5) 'Secretary' means the Secretary of the Interior.

"Sec. 3. (a) Except in case of emergency imperiling life or property or unavoidable accident, collision, or stranding, and except as

*otherwise permitted by regulations prescribed by the Secretary as hereinafter authorized, it is unlawful for any person to discharge or permit the discharge from any boat or vessel of oil by any method, means, or manner into or upon the navigable waters of the United States, and adjoining shorelines of the United States.*

*“(b) Any person discharging or permitting the discharge of oil from any boat or vessel, into or upon the navigable waters of the United States*

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*shall remove the same from the navigable waters of the United States, and adjoining shorelines immediately. If such person fails to do so, the Secretary may remove the oil or may arrange for its removal, and such person shall be liable to the United States, in addition to the penalties prescribed in section 4 of this Act, for all costs and expenses reasonably incurred by the Secretary in removing the oil from the navigable waters of the United States, and adjoining shorelines of the United States. These costs and expenses shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in rem.*

*“(c) The Secretary may prescribe regulations which—*

*“(1) permit the discharge of oil from boats or vessels in such quantities under such conditions, and at such times and places as in his opinion will not be deleterious to health or marine life or a menace to navigation, or dangerous to persons or property engaged in commerce on navigable waters of the United States; and*

*“(2) relate to the removal or cost of removal, or both, of oil from the navigable waters of the United States, and adjoining shorelines of the United States.*

*“Sec. 4. (a) Any person who violates section 3(a) of this Act shall, upon conviction thereof, be punished by a fine not exceeding \$2,500, or by imprisonment not exceeding one year, or by both such fine and imprisonment for each offense.*

*“(b) Any boat or vessel other than a boat or vessel owned and operated by the United States from which oil is discharged in violation of section 3(a) of this Act shall be liable for a penalty of not more than \$10,000. Clearance of a boat or vessel liable for this penalty from a port of the United States may be withheld until the penalty is paid. The penalty shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in rem in the district court of the United States for any district within which such boat or vessel may be.*

*“Sec. 5. The Commandant of the Coast Guard may, subject to the provisions of section 4450 of the Revised Statutes, as amended (46*

U.S.C. 239), suspend or revoke a license issued to the master or other licensed officer of any boat or vessel found violating the provisions of section 3 of this Act.

"Sec. 6. In the administration of this Act the Secretary may, with the consent of the Commandant of the Coast Guard or the Secretary of the Army, make use of the organization, equipment, and agencies, including engineering, clerical, and other personnel, employed by the Coast Guard or the Department of the Army, respectively, for the preservation and protection of navigable waters of the United States. For the better enforcement of the provisions of this Act, the officers and agents of the United States in charge of river and harbor improvements and persons employed under them by authority of the Secretary of the Army, and persons employed by the Secretary, and officers of the Customs and Coast Guard of the United States shall have the power and authority and it shall be their duty to swear out process and to arrest and take into custody, with or without process, any person who may violate any of such provisions, except that no person shall be arrested without process for a violation not committed in the presence of some one of the aforesaid persons. Whenever any arrest is made under the provisions of this Act the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him,

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and such commissioner, judge or court shall proceed in respect thereto as authorized by law in cases of crimes against the United States.

"Sec. 7. This Act shall be in addition to other laws for the preservation and protection of navigable waters of the United States and shall not be construed as repealing, modifying, or in any manner affecting the provisions of such laws."

(b) The amendment made by subsection (a) of this section shall take effect on the thirtieth day which begins after the date of enactment of this Act.

GEO. H. FALLON,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
JOHN C. KLUCZYNSKI,  
JIM WRIGHT,  
WILLIAM C. CRAMER,  
WILLIAM H. HARSHA,  
JOHN C. KUNKEL,

*Managers on the Part of the House.*

JENNINGS RANDOLPH,  
EDMUND S. MUSKIE,  
FRANK E. MOSS,  
FRED R. HARRIS,  
J. CALEB BOGGS,  
GEORGE MURPHY,

*Managers on the Part of the Senate.*

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## STATEMENT OF THE MANAGERS ON THE PART OF THE HOUSE

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 2947) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

The House amendment struck out all of the Senate bill after the enacting clause and inserted a substitute text.

The committee of conference recommends that the Senate recede from its disagreement to the amendment of the House with an amendment, which is a substitute for both the text of the Senate bill and the text of the House amendment, and that the House agree to the same.

Except for conforming clerical and technical changes, the differences between the House amendment and the substitute agreed to in conference are noted below.

### TITLE I

#### HOUSE AMENDMENT

Title I of the House amendment amends the Federal Water Pollution Control Act by adding to it a new title II containing sections 201 through 211 the provisions of which are hereafter set forth.

The purpose of this new title II is stated in section 201 to be the acceleration of pollution control and abatement programs through preparation and development of basin pollution control and abatement plans and through the establishment of additional incentives to encourage waste treatment consistent with quality standards.

Section 202 of the proposed title II authorizes the Governor of a State to develop a basin plan in the case of intrastate waters and the Governors of States and appropriate interstate agencies to develop a basin plan in the case of interstate waters. Certain specific requirements for majority approval are established in the case of the Upper

Colorado River Basin, the Columbia River Basin, and the Hudson River Basin.

Section 203 of the proposed title II provides for review of the proposed basin plan after its submission to the Secretary of the Interior, by the Secretary of the Department of Housing and Urban Development, the Water Resources Council and, when appropriate, the Secretary of State. After this review the Secretary of the Interior is required to approve the plan if he determines that it will adequately and effectively maintain the waters covered by it at a level of quality established by the applicable water quality standards.

Section 204 of the proposed title II provides for the transmission of the plan by the Secretary of the Interior to Congress for its approval by specific statute.

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Section 205 of the proposed title II authorizes grants to aid in financing construction of treatment works within a basin after a basin plan therefor has been approved. The basic amount of the grant is 40 percent, but this can be increased to 50 percent if the State agrees to pay at least 25 percent of the cost of all projects for which Federal grants are to be made from the same allocation. A further provision of this section prohibits duplication of grants, except supplementary grants under the Appalachia Act or the Economic Development Act. In addition the section prohibits a grant unless the treatment works have been approved by the appropriate State water pollution control agency and certified as entitled to priority over other projects.

Section 206 of the proposed title II prohibits other Federal grants from being made under any other provision of law once a basin plan has been approved unless in the judgment of the Secretary the works for which the grant is to be made conform to the basin plan.

Section 207 of the proposed title II authorizes the Secretary to make grants of up to 50 percent of the administrative expenses of a planning agency in preparing a basin plan. In the case of intrastate waters this planning agency must be an agency of State government. In the case of interstate waters the planning agency must be either agencies of State governments or an interstate agency.

Section 208 of the proposed title II authorizes the detail of Federal employees to assist a State or interstate agency in the preparation of a basic plan.

Section 209 of the proposed title II specifically provides that the Tennessee River Valley Authority and the Delaware River Basin Commission are planning agencies for the purposes of this act and provides that basin plans prepared by them are to be submitted directly by them to Congress.

Section 210 of the proposed title II makes the provisions of the act, commonly referred to as the Davis-Bacon Act, applicable to these grants.

Section 211 of the proposed title II defines the terms “basin” and “construction” for the purposes of the title.

#### CONFERENCE SUBSTITUTE

The conference substitute proposes a new title I in place of both the title I contained in the Senate bill and the title I contained in the House amendment.

Section 101 of title I of the proposed conference substitute amends section 3 of the Federal Water Pollution Control Act by adding a new subsection (c) to that section. Paragraph (1) of this subsection (c) requires the Secretary to make a grant to pay up to 50 percent of the administrative expenses of a planning agency for a period of not to exceed 3 years if such agency provides for adequate representation of appropriate State, interstate, local, or (when appropriate) international interests in the basin or portion thereof involved, and is capable of developing an effective, comprehensive water quality control and abatement plan for a basin. This grant is to be made only upon request of the Governor of a State, or a majority of the Governors when more than one State is involved.

Paragraph (2) of this new subsection (c) requires a planning agency receiving a grant to develop a comprehensive pollution control and abatement plan for the basin (1) which is consistent with any appli-

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cable water quality standards established pursuant to current law within the basin, (2) which recommends such treatment works and sewer systems as will provide the most effective and economical means of collecting, storing, treating, and purifying wastes, (3) which recommends means to encourage both municipal and industrial use of such works and systems, (4) which recommends maintenance and improvement of water quality standards within the basin or portion thereof, and (5) which recommends methods of adequately financing those facilities necessary to implement the plan.

Paragraph (3) of this subsection (c) defines the term “basin” to include rivers and their tributaries, streams coastal waters, sounds, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby. This is the same definition of this term as is contained in the House amendment.

It is the intention of the conferees that administrative expenses as used in this subsection includes planning expenses.

## TITLE II

## RESEARCH AND DEVELOPMENT

## HOUSE AMENDMENT

Section 202 of the House amendment makes five amendments to section 5 of the Federal Water Pollution Control Act. The first of these amendments includes within the scope of the research authorized to be carried out by section 5, (1) research with respect to pollution resulting from the discharge of untreated or inadequately treated sewage or other wastes from sewers which carry storm water, or both storm waters and sewage or other wastes, and (2) research into the temporary use of new or improved chemical additives which provide substantial immediate improvement to existing treatment processes.

The second of these amendments adds a new subsection (d) to section 5 authorizing grants for research and demonstration for prevention of pollution of water by industry, including, but not limited to, the treatment of industrial wastes. No grant can be made for more than \$1 million nor be more than 70 percent of the cost of the project, and the project must serve a useful purpose in the development or demonstration of a method for preventing pollution which has industrywide application.

The third of these amendments would repeal paragraph (2) of subsection (d) of the existing law which is a limitation on the appropriations to carry out that subsection of not more than \$5 million per year with an overall limitation of \$25 million to carry out the subsection.

The fourth of these amendments adds a new subsection (h) to section 5 requiring a comprehensive study of the effects of pollution in the estuaries and estuarine zones of the United States.

The fifth of these amendments adds a new subsection (i) to section 5 containing an overall limitation on the authorization of appropriations to carry out section 5 of not to exceed \$75 million per fiscal year for fiscal 1967, 1968, and 1969, with a requirement that at least 25 percent of the appropriation for each fiscal year must be expended in carrying out research on industry pollution as authorized by subsection (d).

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## CONFERENCE SUBSTITUTE

Section 201 (a) of the conference substitute amends section 6 of the Federal Water Pollution Control Act to authorize in subsection (a) thereof the Secretary to make grants to States, municipalities, or intermunicipal or interstate agencies for the purpose of assisting in

developing projects to demonstrate new or improved methods of controlling the discharge of untreated or inadequately treated sewage or other wastes from sewers carrying storm water or both storm water and sewage or other wastes, and grants to assist in developing projects to demonstrate advanced waste treatment and water purification methods (including temporary use of new or improved chemical additives) or new or improved methods of joint treatment systems for municipal and industrial wastes and to make grants for the purpose of reports, plans, and specifications in connection therewith. These grants shall be subject to the following limitations: (1) the project must have been approved by the appropriate State water pollution control agencies and the Secretary, (2) no grant shall be made in an amount exceeding 75 percent of the estimated reasonable cost of the project, and (3) no grant shall be made for a project unless it will serve as a useful demonstration for a purpose set forth in subsection (a).

Subsection (b) of the proposed new section 6 authorizes the Secretary to make grants for research and demonstration projects for prevention of pollution of water by industry including the treating of industrial waste. These grants shall be subject to the following limitations: (1) no grant shall be made in excess of \$1 million; (2) no grant shall be made for more than 70 percent of the cost of the project; and (3) no grant shall be made for any project unless it will serve a useful purpose in developing or demonstrating a new or improved method of treating industrial wastes or otherwise preventing pollution by industry, which method must have an industry-wide application.

Subsection (e) of the proposed new section 6 authorizes for fiscal years 1966, 1967, 1968, and 1969, \$20 million per year to carry out this section. It is the intention of the conferees that these funds shall first be available for the purposes of section 6(a) (1) (storm and dual sewer systems research) and to the extent not needed for such purposes for the other research authorized by this section. For fiscal years 1967, 1968, and 1969, \$20 million per year is authorized for projects for advanced waste treatment and water purification or new or improved methods of joint treatment systems, as provided in clause (2) of subsection (a) of the revised section 6, and \$20 million per fiscal year is authorized for the fiscal years 1967, 1968, and 1969 for research on industrial pollution as provided in subsection (b) of the revised section 6.

Section 201(b) of the conference substitute amends section 5 of the Federal Water Pollution Control Act to add a new subsection (g) requiring a comprehensive study of the effects of pollution including sedimentation in the estuaries and estuarine zones of the United



States. This subsection provides for the same study as is contained in the House amendment. In addition, this section of the conference substitute adds to such section 5 a new subsection (h) which authorizes not to exceed \$60 million for fiscal year 1968, and \$65 million for fiscal year 1969 to carry out section 5 (other than subsec. (g) which

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contains its own authorization of \$1 million per fiscal year through fiscal year 1969).

Section 201(c) amends section 5(d) of the Federal Water Pollution Control Act to repeal paragraph (2) thereof which contains a specific limitation on appropriations for that subsection. This is no longer necessary in view of the overall limitation provided in the new subsection (h) of this section.

#### COST ESTIMATE AND STUDY

##### HOUSE AMENDMENT

Section 203 of the House amendment amends section 6 of the Federal Water Pollution Control Act to require the Secretary of the Interior to make a detailed estimate of the cost of carrying out the Federal Water Pollution Control Act, a comprehensive study of the economic impact on affected units of Government of the cost of treatment facilities, and a comprehensive analysis of the national requirements for, and the cost of, treating waste to attain such water quality standards as are established pursuant to the Federal Water Pollution Control Act or applicable law. The Secretary is required to submit this estimate and study for the 3-year period beginning July 1, 1968, to Congress by January 10, 1968, and to update the study each year thereafter. In addition, the Secretary is required to make an investigation and study to determine (1) the need for additional trained State and local personnel to carry out water pollution control programs and (2) means of using existing Federal training programs to train such personnel. This report is to be given to the President and Congress not later than July 1, 1967.

##### CONFERENCE SUBSTITUTE

Section 210 of the conference substitute amends the Federal Water Pollution Control Act by adding thereto a new section 16 which would require the same studies as are required by section 203 of the House amendment except that the House amendment requires the study for a 3-year period beginning July 1, 1968, and the conference substitute requires it for a 5-year period beginning on that date, and the House amendment requires the study for the purpose of information for

fiscal years beginning after June 30, 1967, and the conference substitute requires it with respect to fiscal years beginning after June 30, 1968.

#### GRANTS FOR WATER POLLUTION CONTROL PROGRAMS

##### HOUSE AMENDMENT

Section 204 of the House amendment increases the authorization for grants for water pollution control programs authorized by section 7 of the Federal Water Pollution Control Act from \$5 to \$10 million for the fiscal year ending June 30, 1968, and authorizes \$10 million for the fiscal year ending June 30, 1969.

##### CONFERENCE SUBSTITUTE

Section 202 (a) of the conference substitute increases the authorizations for grants for water pollution control programs authorized by

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section 7 of the Federal Water Pollution Control Act from \$5 to \$10 million for the fiscal year ending June 30, 1968, and authorizes \$10 million per fiscal year for each subsequent fiscal year to and including fiscal year ending June 30, 1971.

In addition, subsection (b) of section 202 of the conference substitute amends section 7 of the Federal Water Pollution Control Act to include specifically the training of personnel of public agencies as one of the purposes for which grants authorized by that section may be used.

#### LIMITATION ON GRANTS FOR CONSTRUCTION

##### HOUSE AMENDMENT

Section 205 of the House amendment amends subsection (b) of section 8 of the Federal Water Pollution and Control Act by increasing the existing dollar limitations on construction grants from \$1.2 million and \$4.8 million to \$2.4 million and \$9.6 million, respectively. It makes a conforming amendment to this subsection by striking out clause (2) (B) which is required as a result of the amendment made to subsection (d) of section 8 by section 206 of the House amendment. It further amends subsection (b) of section 8 by providing that the 30-percent limitation on construction grants shall be increased to 40 percent and the dollar limitation be made inapplicable in the case of a specific allocation if the State agrees to pay at least 30 percent of the estimated reasonable cost of all projects for which Federal grants are made from that allocation. These amendments are to take effect July 1, 1966.

## CONFERENCE SUBSTITUTE

Section 203 of the conference substitute amends section 8(b) of the Federal Water Pollution Control Act to provide that Federal grants under section 8 shall be subject to the following limitations: No grant shall be made (1) unless the project is approved by appropriate State water pollution control agencies and by the Secretary and is included in a comprehensive program developed pursuant to this act (this requirement is contained in existing law); (2) in an amount exceeding 30 percent of the estimated reasonable cost of the project as determined by the Secretary (the dollar limitations in existing law are deleted); (3) unless the grantee agrees to pay the remaining cost (this is a provision of existing law); (4) until the applicant has made provision for assuring proper operation and maintenance of the treatment works after construction (this is a condition of existing law); and (5) unless the project conforms to the State plan submitted in accordance with section 7 and has been certified by the State water pollution control agency as entitled to priority over other eligible projects (this provision is the same as existing law). The 30-percent limitation imposed by clause (2) shall be increased to a maximum of 40 percent in the case of grants made from funds allocated to a State if the State agrees to pay not less than 30 percent of the estimated reasonable cost of all projects for which Federal grants are to be made from that allocation. The 30-percent limitation shall be increased to a maximum of 50 percent in the case of grants made from funds allocated to the State if the State agrees to pay not less than 25 percent of the estimated reasonable cost of all projects for which Federal grants are to be made from that allocation and if enforceable water

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quality standards have been established for the waters into which the project discharges, in accordance with section 10(c) of the act in the case of interstate waters, and under State law in the case of intrastate waters.

The conferees agree that the adequacy of enforceable water quality standards established by the State for intrastate waters shall not be subject to review by the Secretary.

The amendment made to section 8(b) by section 204 of the conference substitute is to take effect July 1, 1967.

## AUTHORIZATION FOR CONSTRUCTION GRANTS

## HOUSE AMENDMENT

Section 206 of the House amendment amends subsection (d) of section 8 of the Federal Water Pollution Control Act by striking out

the requirement that at least 50 percent of the first \$100 million appropriated for fiscal years beginning on or after July 1, 1965, shall be used for grants in municipalities of 125,000 population or under. This section further amends subsection (d) of section 8 by authorizing \$300 million for construction grants for fiscal year 1968, \$400 million for fiscal year 1969, \$650 million for fiscal year 1970, and \$950 million for fiscal year 1971.

#### CONFERENCE SUBSTITUTE

Section 205 of the conference substitute retains the requirement in section 8(d) of the Federal Water Pollution Control Act that at least 50 percent of the first \$100 million appropriated for fiscal years beginning on or after July 1, 1965, shall be used for grants in municipalities of 125,000 population or under. Section 8(d) is amended to authorize \$450 million for construction grants for fiscal 1968, \$700 million for fiscal year 1969, \$1 billion for fiscal year 1970, and \$1,250 million for fiscal year 1971.

This represents an increase of \$1,100 million over the total amount authorized for this purpose in the House amendment for 4 fiscal years and a decrease of \$2,450 million under the total amount so authorized in the Senate bill for 5 fiscal years.

#### REIMBURSEMENT

#### HOUSE AMENDMENT

Section 207 of the House amendment adds a new subsection (h) to section 8 of the Federal Water Pollution Control Act. This new subsection (h) provides that if before construction of a treatment works the Secretary approves the project and the State, local, or interstate agency thereafter constructs it and submits an application approved by the appropriate State water pollution control agency for a grant, the Secretary upon his approval of the application is authorized to make a grant for such project to be paid from future appropriations. No such grant shall be made unless all of the provisions of this act are complied with to the same extent and with the same effect as though this were a grant for future construction and no such grant shall be made in an amount exceeding that which would otherwise be made under this section for future construction of the project. Neither

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approval of the project by the Secretary nor the making of a grant to be paid from future appropriations is to be construed to constitute a commitment or obligation of the United States to provide the funds to make or pay any grant. The application of this provision is made

retroactive to any project the construction of which is initiated after June 30, 1966.

#### CONFERENCE SUBSTITUTE

Section 204 of the conference substitute amends section 8(c) of the Federal Water Pollution Control Act to provide that in the case of any project on which construction was initiated after June 30, 1966, which was approved by the appropriate State water pollution control agency and which the Secretary finds meets the requirements of section 8 but which was constructed without Federal financial assistance, the allotments for construction grants for any fiscal year ending before July 1, 1971, shall also be available to make payments for reimbursement of State or local funds used for that project before July 1, 1971, to the extent that financial assistance could have been provided under section 8 if the project had been approved pursuant to section 8 and adequate funds had been available to make a grant for the project. In the case of a project on which construction was initiated after June 30, 1966, and which was constructed with financial assistance pursuant to section 8 but the amount of such assistance was a lesser percent of the cost of construction than was allowable pursuant to section 8, such allotments shall also be available for payments and reimbursement of State or local funds used for such project before July 1, 1971, to the extent that assistance could have been provided under this section if adequate funds had been available. Neither a finding by the Secretary that a project meets the requirements of this section nor any other provision of section 8(c) is to be construed to constitute a commitment or obligation of the United States to provide funds or to make or to pay any grant for such project.

In the case of projects commenced after June 30, 1966, which were constructed with assistance pursuant to section 8 but which assistance was a lesser percent of the cost than allowable pursuant to this section, the conferees intend that reimbursement of amounts shall be subject to the limitations of law in effect at the time the project is initiated.

The conferees do not intend to create a preferred class of projects that would be entitled to reimbursement at these higher percentages provided in the conference substitute.

#### ENFORCEMENT MEASURES AGAINST POLLUTION

##### HOUSE AMENDMENT

Section 208 of the House amendment amends subsection (f) of section 10 of the Federal Water Pollution Control Act to require the hearing board to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his

views to the board. In addition, this subsection is amended to provide that in connection with any hearing the Secretary is authorized to require any person whose alleged activities result in discharges causing or contributing to water pollution to file a report furnishing such information as may reasonably be required as to the character, kind, and quality of the discharges and the use of facilities or other

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means to prevent or reduce such discharges by the person filing the report. No person shall be required to divulge trade secrets or secret processes. Failure to file a report after 30 days' notice shall be punishable by a civil penalty of \$100 per day.

#### CONFERENCE SUBSTITUTE

Section 207 of the conference substitute amends section 10 (d) (3) of the Federal Water Pollution Control Act (as redesignated) to provide that it shall be the responsibility of the chairman of the conference to give every person contributing to the alleged pollution or affected by it an opportunity to make a full statement of his views to the conference. There was no comparable provision in the House amendment.

It is the understanding of the conferees that the chairman of a conference called in connection with water pollution control or abatement may require the statements of the persons contributing to or affected by the alleged pollution to be filed with the conference in writing rather than being given orally in every instance.

Section 208 of the conference substitute amends section 10 of the Federal Water Pollution Control Act to add a new subsection (k) to that section. Paragraph (1) of this new subsection (k) provides that at the request of a majority of the conferees in any conference called under section 10 the Secretary is authorized to request any person whose alleged activities result in discharges causing or contributing to water pollution, to file with him a report (in a form prescribed by the Secretary in regulations) based on existing data, furnishing such information as may reasonably be requested as to the character, kind, and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing the report. No one is to be required in such report to divulge trade secrets or secret processes, and all information reported is to be considered confidential for the purposes of section 1905 of title 18 of the United States Code.

Paragraph (2) of the new subsection (k) provides that if a person required to file a report shall fail to do so within the time fixed by regulations for filing it and he continues to fail to do so for 30 days

after notice of his default such person may, by order of a majority of the conferees, be subject to a forfeiture of \$100 per day for each day such failure continues. Such forfeiture is recoverable in a civil suit in the name of the United States brought in the district where such person has his principal office or in any district in which he does business. The Secretary on application may remit or mitigate any such forfeiture. It is established that it is the duty of the U.S. attorneys to prosecute for the recovery of such forfeitures.

It is the intention of the conferees that nothing in this new subsection (k) shall be construed to require any person to submit a report to the conference if he does not wish to do so. If, however, he agrees to file such a report and thereafter fails to do so, he shall be subject to the penalties provided in paragraph (2) of such subsection.

Section 208 (b) of the conference substitute amends section 10 (f) of the Federal Water Pollution Control Act in the same manner as is provided in section 208 of the House amendment.

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#### DEFINITIONS

##### HOUSE AMENDMENT

Section 209 of the House amendment amends the definition of "municipality" contained in section 13(f) of the Federal Water Pollution Control Act to provide that for the purposes of such act that term shall include "an Indian tribe or an authorized Indian tribal organization."

##### CONFERENCE SUBSTITUTE

Section 209 of the conference substitute is the same as section 209 of the House amendment. It is the intention of the conferees that this amendment to the definition of municipality shall be applicable to Indians on State as well as Federal reservations.

#### OIL POLLUTION ACT, 1924

##### HOUSE AMENDMENT

Section 210 of the House amendment makes two amendments to the Oil Pollution Act, 1924.

The first of these substitutes the Secretary of the Interior for the Secretary of the Army as the *Federal officer* responsible for administering the Act.

The second of these amendments makes certain technical changes in section 7 of the Oil Pollution Act, 1924, to authorize the Secretary of the Interior to utilize certain employees of the Secretary of the Army

and to authorize certain persons employed by the Secretary of the Army, the Secretary of the Interior, officers of the customs and Coast Guard of the United States, to arrest any person violating the provisions of the act.

#### CONFERENCE SUBSTITUTE

Section 211 of the conference substitute amends the Oil Pollution Act, 1924, to make the following changes in that law.

(1) In section (2) the term "discharge" is defined to mean any grossly negligent, or willful spilling, leaking, pumping, pouring, emitting, or emptying of oil, the term "navigable waters of the United States" is defined to mean all portions of the seas within the territorial jurisdiction of the United States and all inland waters navigable in fact, and the term "Secretary" is defined to mean the Secretary of the Interior.

(2) Section 3 is amended to provide that except in case of an emergency imperiling life or property or unavoidable accidents, collision, or stranding, and, except as otherwise permitted by regulations prescribed by the Secretary, it is unlawful for any person to discharge or permit the discharge from any boat or vessel of oil by any method, means, or manner into or upon the navigable waters of the United States and adjoining shorelines of the United States. Any person so discharging or permitting the discharge of oil shall remove it from the waters and shorelines immediately. If such person fails to do so the Secretary may remove the oil or arrange for its removal and in addition to the penalties prescribed in section 4, such person shall be liable

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for all costs and expenses reasonably incurred by the Secretary in so doing. These costs and expenses constitute a lien on the boat or vessel recoverable in proceedings by libel in rem. The Secretary is authorized to prescribe regulations permitting the discharge of oil so as not to be deleterious to health, marine life, a menace to navigation, or dangerous to persons or property engaged in commerce on navigable waters, as well as regulations relating to the removal or cost of removal, or both, of oil from the navigable waters and adjoining shorelines of the United States.

(3) Section 4 provides that a person who violates section 3 (a) shall be punished by a fine not exceeding \$2,500 or imprisonment not exceeding 1 year, or both, and any boat or vessel except one owned and operated by the United States, from which oil is discharged in violation of section 3 (a) is to be liable for a penalty of not more than \$10,000. Clearance from port for a boat or vessel liable for this penalty may be withheld until the penalty is paid, and such penalty is a



lien on such boat or vessel recoverable in proceedings by libel in rem.

(4) Section 5, except for technical amendments, is the same as existing law, and would permit the suspension or revocation of a license of a master or other officer of a vessel found violating section 3 of the act.

(5) Section 6 is amended to authorize the Secretary of the Interior, with the consent of the Commandant of the Coast Guard or the Secretary of the Army, as the case may be, to utilize certain persons employed by the Coast Guard or the Department of the Army, and to authorize certain persons employed by the Secretary of the Army, the Department of the Interior, officers of the customs and Coast Guard of the United States, to arrest persons violating the act.

(6) Section 7 provides that the Oil Pollution Act, 1924, is in addition to other laws for the preservation and protection of the navigable waters of the United States, and is not to be construed as repealing, modifying, or in any manner affecting the provisions of such laws.

#### INCENTIVE STUDY

##### HOUSE AMENDMENT

Section 211 of the House amendment authorizes the Secretary of the Interior to make a full and complete investigation and study of methods for providing incentives to assist in constructing facilities and works by industry to reduce or abate water pollution, including possible use of tax incentives. In making this study he is required to consult with the Secretary of the Treasury as well as other department and agency heads. The report shall be submitted to Congress on this study not later than January 30, 1968.

##### CONFERENCE SUBSTITUTE

Section 210 of the conference substitute amends the Federal Water Pollution Control Act to add thereto a new section 18 requiring the same investigation and study as is required by section 211 of the House amendment.

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#### INVESTIGATION OF POLLUTION FROM WATERCRAFT

##### HOUSE AMENDMENT

Section 212 of the House amendment requires the Secretary of the Interior to conduct a full and complete investigation and study of pollution of the navigable waters of the United States from litter and sewage from watercraft using such waters and methods of abating

this pollution. This report shall be submitted to Congress not later than July 1, 1967.

#### CONFERENCE SUBSTITUTE

Section 210 of the conference substitute amends the Federal Water Pollution Control Act by adding a new section 17 thereto which requires the Secretary of the Interior, in consultation with the Secretary of the Army, the Secretary of the Department in which the Coast Guard is operating, the Secretary of Health, Education, and Welfare, and the Secretary of Commerce, to conduct a full and complete investigation and study of pollution of all navigable waters of the United States from litter and sewage from watercraft using such waters and methods for abating such pollution. This report shall be submitted not later than July 1, 1967.

#### POLLUTION AFFECTING FOREIGN COUNTRIES

Section 206 of the conference substitute adds a new paragraph (2) to section 10 (d) of the Federal Water Pollution Control Act which provides that whenever the Secretary, upon receipt of certain information from an international agency, has reason to believe that pollution endangering the health and welfare of persons in a foreign country is occurring, and is requested to abate such pollution by the Secretary of State, to give notice to the State water pollution control agency of the State in which the discharge or discharges originate and to the interstate water pollution control agency involved, if any, and to call a conference if he believes such pollution is sufficient to warrant such action. The foreign country adversely affected shall be invited through the Secretary of State to attend and participate and is given the right of a State pollution control agency. This paragraph is to apply only to a foreign country which the Secretary determines has given the United States essentially the same rights with respect to prevention and control of water pollution as is given that country by this paragraph. Neither the 1909 boundary treaty between the United States and Canada nor the water utilization treaty of 1944 between Mexico and the United States is modified, amended, repealed, or otherwise affected as a result of this paragraph.

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## HOUSE AMENDMENT

The House amendment contained no such provision.

GEO. H. FALLON,  
JOHN A. BLATNIK,  
ROBERT E. JONES,  
JOHN C. KLUCZYNSKI,  
JIM WRIGHT,  
WILLIAM C. CRAMER,  
WILLIAM H. HARSHA,  
JOHN C. KUNKEL,

*Managers on the Part of the House.*

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**1.2j(4) CONGRESSIONAL RECORD, Vol. 112 (1966)**

**1.2j(4)(a) July 13: Considered and passed Senate, pp. 15585-15603,  
15605-15620, 15624-15633**

**FEDERAL WATER POLLUTION CON-  
TROL AMENDMENTS AND CLEAN  
RIVERS RESTORATION ACT OF  
1966**

Mr. LONG of Louisiana. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of the unfinished business.

The PRESIDING OFFICER. The bill will be stated by title.

The LEGISLATIVE CLERK. A bill (S. 2947) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

The PRESIDING OFFICER. Is there objection to the request of the Senator from Louisiana?

There being no objection, the Senate proceeded to consider the bill (S. 2947).

Mr. LONG of Louisiana. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MUSKIE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MUSKIE. Mr. President, it is no accident that the Senate is considering major pollution abatement and control legislation for the second day in a row.

Yesterday, we approved—by a vote of 80-0—amendments to the Clean Air Act. Today we are taking up amendments to the Water Quality Act of 1965 and the basic Federal Water Pollution Control Act. There are 48 sponsors on today's bill. *It has the unanimous support of the members of the Committee on Public Works.*

All of this is an indication of the importance the American people attach to the improvement of the quality of our environment. The President has called for action. Our constituents have called for action. And we have developed legislation designed to repair the damage of past and present waste and to upgrade the quality of our Nation's waters.

We can, as Members of this Congress, take pride in the legislation we have developed. It bears the fruit of many minds on both sides of this Chamber. I want to pay tribute to the late chairman of our committee, Senator Pat Mc-

Namara, who created the Subcommittee on Air and Water Pollution; to our distinguished chairman, the senior Senator

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from West Virginia, [Mr. RANDOLPH], who has challenged us to greater efforts, and to my colleague, the junior Senator from Delaware [Mr. Boggs], who, as ranking minority member, has been a strong right arm in our efforts to eliminate harmful pollution from our air and waters. I want to express my thanks, also, to other members of the subcommittee and the full committee, to the committee staff and to the staffs of committee members who have worked long and hard to perfect the legislation developed by our committee.

In the early days of our work, I sometimes despaired of progress in this field. But in the last year we have seen a remarkable shift in opinion and support.

Industries who once opposed us are now eager to get on with the job. State officials who viewed our proposals with alarm want to coordinate their pollution control programs more effectively with other States and with the Federal Government. Federal officials who were open in their skepticism now find our legislation useful and challenging.

And behind all these changes is the voice of the American people, demanding an end to the waste of our resources, insisting on an effective program, supported by the needed funds to do the job.

Mr. President, we have a mandate—from our constituents and from our posterity—to get on with the job of protecting our water resources. We do not have much time. We do not have all the answers. But we know enough about our needs and about the magnitude of our problems to make a substantial beginning toward ending the burdens of inadequate and poor quality water supplies.

As an example of the demand for action we are receiving from our constituents, I ask unanimous consent to insert

at this point in the RECORD a series of articles and editorials from Maine newspapers.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. MUSKIE. Mr. President, these are but a sampling, from one State—a State which has an abundance of water resources. The problems of Maine can be multiplied a hundredfold for the Nation as a whole. The legislation we are offering today is designed to help answer these problems.

The bill pending before the Senate today, S. 2947, can be considered the first omnibus water pollution control act. It extends and broadens the existing program; it provides a new emphasis in the clean rivers concept; it strengthens other existing law, including the Oil Pollution Act of 1924; and it manifests the total commitment of the Federal Government to abatement of the pollution of one of the Nation's most vital resources.

Last year the Congress enacted the Water Quality Act, authorizing the establishment of water quality standards on all the Nation's interstate rivers. The Water Quality Act was a major step toward achieving the ultimate goal of control and abatement of water pollution. That act recognized the States' primary responsibility in this area, by providing an opportunity for the States to adopt water quality criteria applicable to interstate waters or portions thereof, within each State. The water quality criteria, combined with a plan for implementation and enforcement of the criteria adopted, when approved by the Secretary, will be the water quality standards. It is important that this distinction be made. Water quality standards include both the criteria and the plan.

Following passage of the act, the Subcommittee on Air and Water Pollution held extensive hearings throughout the Nation and in Washington on the financial needs to support an adequate water quality program. On the basis of that

information, S. 2947, cosponsored by 48 Members of the Senate, was introduced. The bill you have before you today is a modified form of S. 2947. Several provisions are identical to those in the original bill, including authorization of \$6 billion as the minimum Federal investment to provide adequate municipal secondary treatment for 80 percent of the population. This figure represents 30 percent of the committee's estimate of a \$20 billion total cost of those facilities. That \$20 billion does not include either treatment of industrial effluent or separation of storm and sanitary sewers, both of which will require multi-million-dollar investment. I want to emphasize the fact that \$20 billion is a conservative estimate; \$6 billion is the minimum Federal share of an adequate program for the next 6 years.

S. 2947 also includes elimination of dollar ceilings on grants to State, local, and interstate agencies for the construction of sewage treatment works.

S. 2947, as amended, provides for an intensified basic research program by authorizing funds for research on water quality requirements for all water uses, for research into the handling and disposal of radioactive wastes, and for other research, including the problems associated with waste discharge from boats and ships, household or small waste disposal systems, eutrophication, which is the special problem of Lake Erie—animal feedlot wastes, agricultural runoff, and numerous other specific pollution problems.

S. 2947, as amended, authorizes a research and demonstration program into advanced waste treatment and water purification and joint municipal-industrial treatment facilities.

S. 2947 provides for a vitally needed study of the pollution of the estuaries and estuarine zones and increases funds available for Federal program grants to State and interstate agencies from \$5 million annually to \$10 million annually.

The committee believes it is essential to accelerate our research and develop-

ment effort, with special emphasis on contract research.

The bill also authorizes a loan program to aid communities in depressed areas where sewage treatment facilities are vitally necessary, but where the tax base is so eroded that the communities can neither levy taxes nor float bonds sufficient to meet the local share of the project's cost.

Other major provisions of the bill include a prefinancing provision whereby those States which are prepared to go ahead more rapidly to construct approved projects with State or local funds are authorized to use later Federal fund allocations to reimburse the State or local government for the Federal share of such projects. The reimbursement feature is limited to the life of the monetary authorization under S. 2947.

Metropolitan areas have special pollution control problems. The volume of sewage is great. Land costs are high. Multiple jurisdictions make coordinated planning and action difficult. To encourage such joint action, the committee offers an incentive of a 10-percent Federal grant bonus where the project is certified as consistent with metropolitanwide plans. This would improve programs and cut costs.

The committee also has applied to the problem of international pollution the authority provided in the act for abating pollution situations wholly within the United States; has expanded participation in the conference stage of the enforcement proceeding; has provided a method for the Secretary to obtain information necessary as to the character and extent of pollution; has provided for a study of the costs of an effective national pollution control program, presently estimated at approximately \$100 billion; and has provided for a study of pollution from boats and vessels on the Nation's navigable waters.

S. 2947 amends the Refuse Act of 1899 to assure that its administration is consistent with the purposes of the Federal Water Pollution Control Act, and has

amended the Oil Pollution Act of 1924, extending the enforcement provisions of that act and transferring its administration to the Secretary of the Interior.

The Clean Rivers Restoration Act was proposed by the administration and is included as title I of S. 2947. It authorizes planning pollution control and abatement on a river basin basis and offers incentives for sewage treatment construction under such plans. In essence, the clean rivers program is an expansion of the concepts expressed in the Federal Water Pollution Control Act of 1965 relative to water quality standards.

In my earlier remarks, I noted that water quality standards will more than simply set water quality criteria. In order to have standards, it is essential to have both the criteria and the plan for implementation of those criteria. The Water Quality Act was designed for application within the context of watersheds. But the committee did not specify either the organization of, or the formulation of, that plan of implementation in terms of construction plans and schedules.

The clean rivers restoration program, as provided in the committee version of S. 2947, carries the river basin oriented water quality program the next logical step.

Under the clean rivers program, the Secretary of the Interior, at the request of a Governor, or Governors, of a State,

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or States, will designate a planning agency with appropriate local, State, and Federal representation to develop necessary comprehensive plans for the control and abatement of pollution in a given river basin or portion thereof. This title provides that the designated planning agency will have 3 years in which to come up with an approved plan. The plan will include recommendations for the treatment works and related sewer facilities, joint municipal or municipal-industrial systems, where appropriate, and necessary steps to maintain

and improve water quality standards, and an adequate financing program.

The planning agency has been deliberately given broad instructions by the committee so that it will not be forced to develop a plan which is inconsistent with a particular river basin or its existing political institution. The recommendations of the planning agency are subject to review by State, local and Federal interests and prior to acceptance of any plan. Approval by the Secretary is required if projects under the plan are to qualify for Federal assistance under this title.

As an incentive for the States to initiate planning on a river basin basis, title I provides that after designation of an appropriate planning agency, and if facilities proposed within the river basin involved meet the qualifications established under section 207 of title I of the act, the Secretary may make a grant in an amount not to exceed 50 percent of the total cost of a project.

In order to receive this grant, the States are required to pay 30 percent of the cost of the project, and the Governor must provide satisfactory assurance that statewide water quality standards consistent with section 10(c) of the Federal Water Pollution Control Act are in effect or will be established.

In the original administration proposal, the clean rivers restoration plan included a "one shot" financing plan which was designed to shift the entire burden of financing pollution control to local bodies after an initial Federal investment. The committee rejected this approach as impractical and unwise.

In summary, then, the clean rivers restoration program approaches the pollution abatement problem on a river basin basis. It provides incentives to encourage the States to participate in river basin planning; and in keeping with the precept of the law that the States bear the primary responsibility, the States must agree to assume additional responsibilities. The Federal presence is available to insure the

achievement of our national goals, but not to centralize control of the Nation's water resources.

Mr. President, yesterday during debate on air pollution, I referred to the philosophy of the subcommittee on air and water pollution regarding exploratory efforts on matters which affect the public health and welfare.

During the hearings on water pollution the subcommittee took the opportunity to enlighten itself and the public on potential hazards associated with exposed uranium mill tailings piles in the Colorado River basin. These piles—slag heaps resulting from the uranium milling process—are being eroded by the waters of the Colorado and other natural forces, thereby depositing quantities of radium 226 and thorium 230 in the river.

The Colorado is used for both agricultural and domestic use and any contamination of it can adversely affect the public health. Witnesses from the Federal Water Pollution Control Administration and the Atomic Energy Commission disagreed as to the potential hazard from the tailings piles. The committee was inclined to accept the judgment of Mr. Murray Stein, chief enforcement officer of FWPCA, and his technical experts, who testified that a long-term hazard does exist from erosion of the pilings.

The committee feels that the Atomic Energy Commission has not satisfactorily discharged its responsibilities toward the prevention of radioactive pollution in the Colorado River basin. The AEC has a clear obligation to protect the public from radioactive hazards generated by activities it licenses, regardless of the traditional regulation of radium by the States. Further, through its licensing procedures and title 10, Code of Federal Regulations, part 20 regulations, the AEC has the authority necessary to control radioactive releases from tailings piles of operating and closed mills. In view of the concern of the Federal Water Pollution Control Administration and the Public Health Service, the committee believes the AEC has not fulfilled

its regulatory function or exercised its authority to prevent radioactivity from the tailings piles in the Colorado River basin.

The counsel for the AEC testified that the AEC could require stabilization of the tailings piles if the pile represented a risk to the public health and safety. The Federal Water Pollution Control Administration testified that the piles did represent such a risk. I suggested that the President's Executive Order 11258, dealing with prevention and control of water pollution from Federal activities, contained a section which provided the AEC with more general regulatory authority. This section 1, subsection (3) states:

Pollution caused by all other operations of the Federal Government such as water resources projects and operations under Federal loans, grants, and contracts shall be reduced to the lowest level practicable

This order was issued after the committee, and especially the Senator from Delaware [Mr. Boggs], urged prompt steps to abate pollution from Federal installations, and from facilities of recipients of Federal grants and contract funds.

Although the AEC's counsel offered a legal opinion to the contrary, the committee feels that this Executive order confers upon the AEC sufficient regulatory authority to control the pollution from the uranium mill tailings piles of operating mills under contract to the Government, and that the AEC can provide direction for those owners of non-operating mills—which operated under Government contracts—to provide adequate control of the tailings piles.

The committee recommended that the FWPCA move expeditiously to establish responsibility for control of the tailings piles, and to provide the Congress with adequate assurance that any control measures applied would be sufficient to achieve long-term protection of the health of the people who live within the area, or depend upon the use, of the Colorado River and its tributaries.

The committee is also concerned with the more far-reaching problem of release of radioactivity associated with nuclear powerplants. We intend a much deeper examination of this problem in future hearings. The committee is concerned that standards promulgated with reference to a statistical average man and that an average dose concept may not be satisfactory to protect persons in the population who may have peculiar exposure situations or may adversely react to lower levels of exposure.

Mr. President, the legislation we present to the Senate today represents a substantial advance in the war against water pollution. More importantly, it opens wider the door to improved water quality—to the chance for adequate supplies of water for our citizens to drink, to use in their homes, to enjoy for recreation, and to use in industry and on the farms. It is imaginative, but sound. It represents a reasonable compromise with the administration on its proposals. The bill is meaningful, and one of which the Senate can be proud. I urge its passage.

#### EXHIBIT 1

[From the Portland (Maine), Sunday Telegram, July 3, 1966]

#### COASTAL POLLUTION PROBLEMS—AND PROGRESS—IN MAINE

"... From the rolling, sometimes choppy sea, we view a panorama of rugged coastline... gracious towns nestled here and there within sheltered bays; of dories, yachts and lobster buoys bobbing in the sun; of islands favoring us with views on all sides, of forested hills gently sloping to the sea... a granite mountain rising swiftly, majestically above it..."

Is this a come-on for the tourist dollar from Maine's Department of Economic Development? Is it a Chamber of Commerce salute to the glories of the Maine Coast?

Not exactly.

The mildly poetic paragraph above is found in a Maine Water Improvement Commission 1962 classification study of Maine tidal waters.

But none of the publicity puffs directed to potential tourists of the Maine Coast by the DED and every local chamber of commerce along this great granite threshold of the Atlantic would likely include other, less

poetic observations from this WIC study in their pages

For publicity pieces obviously don't mention the raw sewage and industrial wastes that those "gracious towns" are pouring into "the rolling, sometimes choppy sea"

Nor will they describe the resulting pollution of most of the harbor waters on which those "dories and yachts" are bobbing—or the numerous, tremendous clam flats and their multimillion dollar harvests closed down by health authorities for pollution—or the public bathing beaches where pollution has produced obvious but unadmitted swimming hazards.

Tourism, of course, is an economic mainstay of many Maine coastal towns and they must promote their attractions whether their waters have pollution problems or not.

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A few ocean communities have taken impressive steps to clean up bays, beaches and estuaries as part of their recreational package. Several other similar town projects are in the advanced planning stage, though experience to date shows a wide gap, especially in money, between planning and execution.

But too many communities apparently still have their heads stuck in the sand or mudflats, hoping that the worst—a pollution crisis—won't happen to them, yet doing nothing to prevent one

And in some cases, the Maine Legislature seems to have its head stuck in the same hole.

Pollution of Maine's great rivers, the bulk of its industrial pollution going back decades, has drawn tremendous attention in recent years, thanks to the Maine Water Improvement Commission's surveys and recommendations, and stories of the commission's gains and defeats in its classification legislation.

But the WIC, under its original mandate from the Legislature and in its subsequent studies and recommendations, has been equally concerned with Maine tidal waters and shores from Kittery Point to West Quoddy Head.

Its findings have shown the coast deserves all the concern it can get on pollution problems, problems that, for example, have closed down 106 clam flats, some of them very large and rich, and all of them totaling an estimated 20 per cent of the state's annual harvest potential for this shellfish.

#### TIDE TAKES CARE OF IT

Pollution almost closed down the State's biggest beach resort before construction of a sewage treatment plant rescued its reputation in the nick of time, and it has fouled the state's largest harbor and some of its smallest ones with bacteria-laden Class D water conditions, dangerous to all forms of water recreation.



Since the days that town and individual sewer lines replaced the farmhouse privy, Maine's ocean cities and towns have had a simple answer—pipe it overboard and let the tide take it out. After all, how can you pollute the Atlantic Ocean?

But, as WIC findings have vividly shown, it's not a question of polluting the Atlantic Ocean—it's a question of polluting one's doorstep to that ocean, tide or no tide.

Pollution sets in when the dumping of raw wastes becomes constant. Bacteria and materials in this waste may die and dissipate within a few hours after discharge, but they are being constantly replaced. So in a sense they are not dying and dissipating. And the greater the rate of discharge, the higher this pollution constant is.

The twice-daily tides with their dilution and current factors, and the high oxygen content of the ocean waters they bring in, undoubtedly are a big help in fighting this pollution constant, holding it lower than it otherwise would be. But they don't begin to lick it where a population of any size is involved.

As an incoming tide tremendously dilutes polluted harbor or shore waters, an outgoing tide tremendously concentrates the pollution of remaining waters. It strands much of the waste materials on exposed flats, where this concentration builds up while waiting for the tide's return.

Thus the neighboring cities of Portland, South Portland and Westbrook, daily dumping all their municipal sewage untreated into Casco Bay, augmenting it with the industrial wastes of a major paper mill and numerous waterfront fish and meat processing plants, produce Class D pollution conditions (the worst recognized by WIC classification) in Portland's great harbor and main anchorage, despite eight foot tides.

And a few other coast communities, with much smaller harbors to match their much smaller populations and untreated wastes, have also graduated to the Class D waterfront pollution big league. Bar Harbor is one. Belfast is another.

Class C town and resort waterfronts (unsafe for swimming) are legion along the coast.

#### POLLUTED SHELLFISH

The argument is also made that sewage discharge into tidal waters holds no comparison to discharge of such wastes into inland bodies of water. Because who drinks salt water? Besides, aren't the water volumes of estuaries and bays large enough to prevent the grave damage to aquatic biology found in polluted inland waters?

The trouble with this theory is that while communities don't drink the salt water along their shores, their residents and summer visitors delight in eating the shellfish and

other marine delicacies that live in these waters.

And these tasty little animals, marine biologists find, have a proclivity for absorbing their environmental waters into their body tissues without making fine distinctions about bacteria content or its source. That, for example, is why 106 Maine clam flats have been closed to harvesting by the Department of Sea and Shore Fisheries according to standards set by the U.S. Public Health Service.

The department does its own, constant testing and has sole responsibility for the opening or closing of clam flats.

Its tests are so thorough and regular that the public can rest assured that any clams offered for sale in Maine are a "clean and wholesome" product, says Dana E. Wallace, the department's marine resources scientist.

As for damage to the balance of aquatic life in coastal waters from pollution, this is still a largely unexplored question and for that reason alone should demand a cautious approach if coastal areas value the economics and attractions of their fish harvesting industries.

No doubt more pollution can be absorbed than in fresh water, but the organic matter in human and many industrial wastes is still food and there are plenty of customers for it in the teeming microscopic animal world of salt waters.

As has amply been demonstrated in polluted ponds and rivers, this unnatural food supply can upset nature's balance of water biology, allowing tremendous multiplication of some plant and animal species which may tax their other food sources and starve out life dependent on these sources in resulting competition. Theoretically, such an imbalance can work its way up to higher forms of animal life, including fish, forcing them to look elsewhere for food.

Pollution from the Los Angeles Valley, for example, has caused a huge multiplication in sea urchins. These spiny and very hungry little animals have virtually wiped out the giant ocean floor kelp beds off the Southern California coast.

#### BATTLEGROUND

A single drop of natural salt or fresh water under a microscope at a few hundred times magnification ceases to be just a drop of water, especially if it is favored with a trace of organic pollution.

It becomes instead a bright, quivering little world of hydras, protozoa, and other subkingdoms, transparent little creatures of vast variety in form and movement.

Some of them are wormlike, endlessly writhing and coiling their bodies. There are sack-like little animals, seemingly motionless, who suddenly shoot out and retract their mouth to capture bypassing bits of food.

matter.

There are stick-like little animals which twitch to and fro. And there are shapeless little blobs of animals that just seem to sit, possibly contemplating a reproduction of themselves by simple division.

And for all this activity seen, there is much more beyond the eye's reach, descending to the amazing world of bacteria, nature's simplest and one of her most useful plant forms.

The analogy is perhaps inappropriate, but if Maine's pollution abatement efforts could be put under a microscope, its variety of activity in this field might seem somewhat similar.

The activity ranges from communities which have modernized their sewage systems and built sewage treatment plants to cure chronic and dangerous pollution conditions, down to communities apathetic about the need and angry about the cost of meeting WIC classification standards for their waters.

The WIC currently has in its files planning reports on 91 proposed sewage treatment plants and sewer projects. If all were undertaken as designed, they would cost an estimated \$113.5 million. As it is, facilities totaling \$18.9 million have approached to the construction stage or been completed.

Old Orchard Beach and Bar Harbor, two of Maine's greatest resort towns, are interesting contrasts in performance.

Back in August, 1959, at the height of its summer season, Old Orchard Beach faced perhaps the gravest economic crisis in its history. A Water Improvement Commission report announced that some of the waters at the beach were at D level, heavily polluted and quite unfit for swimming. (Even a B-2 or C rating is unfit for swimming.)

The crisis this presented the town was in three forms: the rapid spread of publicity that would keep summer visitors away; the real danger to public health from further continuance of the conditions; and the possibility of heavy WIC penalties for failure to correct the situation.

Exactly one year later, thanks to earlier plans, Old Orchard Beach held open house at its new \$687,000 primary sewage treatment plant at Ocean Park. The town approved another \$400,000 in sewer system interceptors to eliminate its ocean outfalls, bringing its bonding for these projects to half a million dollars, the federal and state governments funding the balance.

The town then lost no time advertising itself far and wide as "The Cleanest Beach in Maine," which has proved its best return on a painful but proud investment.

At about the same time the WIC put the fat in the fire for Old Orchard Beach, it discovered similar Class D pollution conditions at famed Bar Harbor. It recommended that

waters along the town's shoreline, including a strip of beach, be brought up to a B-1 classification, suitable for swimming and other clean water uses.

After release of the Commission's Hancock County tidal waters survey in 1962, measures were inserted in the town warrant to begin appropriations for a capital improvement fund to finance eventual corrective measures. The voters turned it down, and every year since they have rejected such appropriations.

At Bar Harbor's town meeting this year a capital improvement fund was established to start accumulating money for a building to house town offices. If voters wish to transfer money from this fund for construction of sewage facilities they could do so, but no moneys have as yet been appropriated specifically for correction of water pollution.

In the meantime, the legislature was persuaded to lower the WIC's recommended B-1 classification for the shore area to a Class C requirement. This gives the town a lower goal to shoot for in pollution control.

There's just one little problem. Class C waters are still not suitable for swimming, only for boating and fishing, yet the beach concerned is still heavily used by residents and visitors every summer.

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The Maine Water Improvement Commission has many responsibilities under law, and in trying to fulfill them it encounters many problems. Public attitude is a big one.

"A ruling majority of the people of Maine," observes the commission in its 1965 annual report, "are sufficiently concerned with cost (of pollution control) to cause them to resist really adequate programs."

"This would not be true if the program was accepted as a genuine public works activity for the benefit of all, instead of one to which it is politic to give lip service but which is otherwise placed on a low priority level." But for some towns, that "low priority" level may not be sufficient much longer.

#### ENFORCING THE LAW

The WIC has now virtually completed its classification of Maine coastal waters and river basins and will start to give more attention to enforcement of these classifications in coming months.

Its procedure in water classification begins with surveys of the existing conditions of a body of water. Along the coast these include harbors, estuaries, settled shores, bays and some islands.

After completing its survey of a coastal town's shores, the commission is required to call a public hearing of residents to determine what use these waters are receiving and the types of uses the people would like to see continued or added if possible.

The commissioners and their staff, after such hearings, make the final determination on what "reasonable" classifications should be recommended to the legislature, which has the final say. Thus the law does not try to eliminate all pollution, but merely aims to reduce it to acceptable levels for given uses.

In a good many instances, the Commission has found that a stretch of shore showed a Class B-2, C, or sometimes Class D pollution problem, but that the stretch of shore was popular for swimming and the residents wanted to continue to swim there.

Such a finding would lead the Commission to recommend an upgrading to a B-1 classification, a safe level for swimming. With the legislature's approval, the community would be under orders to bring the waters up to that classification, with or without a deadline, depending on the seriousness of the situation.

The process can be pretty frustrating, for all its logic.

Some coastal communities have not only failed to start corrective steps, but have disputed the WIC's classification recommendations where their voters' voices would be most effective—in Augusta.

Out of 27 coastal towns surveyed in Hancock and Lincoln Counties, the legislature voted lower classifications than recommended by the WIC in all but eight. The Commission's recommendations remained intact only for Sedgwick, Sorrento, Sullivan, Surry Wiscasset, Westport, Edgcomb and Alna.

Raeburn W. MacDonald, WIC chief engineer, recalls one of these appeals with a grin. "One bit of testimony before the legislature was to the effect that nobody ever bathed in the tidal waters of Hancock County as it was far too cold for that purpose. The only purpose they served was to enhance the view."

"In general, however, testimony dwelt upon the expense involved in providing sewage collection and treatment as compared to the 'negligible benefits' to be realized."

In one instance, a town health officer, a doctor of medicine, declared to the publisher of the local weekly paper that the water classification studies made there by the WIC engineers were without validity.

His influential observation just happened to precede a town meeting at which voters turned down a sewage treatment plant for which the town would have paid only 20 per cent of the cost, thanks to matching 30 per cent federal and state pollution control grants plus matching 10 per cent federal and state grants under an accelerated public works program classification.

As a matter of fact, the WIC has had more than one doctor question its on-the-scene pollution testing techniques.

As much as it can, the commission uses its trailer laboratory for bacteria tests of water samples, particularly from salt water. The

laboratory can be virtually backed down to the water's edge. While not able to make as exhaustive tests as Department of Health and Welfare laboratories, it has the important advantage of speed.

That's because coliform bacteria native to animal and human wastes doesn't live long in salt water. And it is the count or frequency of these bacteria in given water samples, together with dissolved oxygen and biochemical oxygen demand measurements, that accurately reflect the degree and danger of the water's pollution to humans from a disease standpoint and to fish from an oxygen standpoint.

Possibly consumed by the protozoa in salt water or killed off by its low temperature or salinity, at least 80 per cent of these coliform bacteria will disappear from a sample in three days. In fact, most disappear the first day, notes MacDonald, but they don't die off at a predictable time rate that would allow later laboratory testing to reflect source conditions.

"Therefore, if we want to know what the situation is at the water's edge, and that is what we need to know, we've got to do most of our testing on the spot rather than mail samples away to a laboratory," he explained.

This holds almost as true for fresh water tests, and the WIC trailer laboratory has been on Androscoggin River duty most of the past year.

When the WIC then turns up frequent Class C and not a few Class D pollution situations in most of the heavily, and even moderately populated sections of the coast, despite dilution by the ocean and its high kill ratio of coliform bacteria in salt water, such findings speak volumes on the potency and immensity of these discharged wastes.

Portland's great harbor, for example, generously fed by Portland, South Portland and Westbrook (whose pollution problems will be examined in depth next week) is a Class D and Class C tidal sewer, for all its continued beauty from a distance. But Portland's Back Bay, a giant tidal pond in the city's midst, can't even stagger up to its Class D classification.

Down the shore a piece, beautiful, yacht-dotted Falmouth Foreside's shore continues in violation of its B-2 classification and town fathers recently received another WIC visitation.

#### WINDOW ON THE BAY

Rockland's big harbor opens onto Penobscot Bay like a window and would seemingly have few problems. But 12 sewer outfalls along two miles of harbor front, half of them in Lermond's Cove, plus numerous private pipes discharging into brooks, followed up by the contributions of waterfront industries, produce Class C conditions bordering on D in sections.

Back in 1960, the city had an engineering survey made by Fay, Spoffard and Thorndike, Boston, which came up with a \$1,365,000 plan for modernizing the sewerage system and construction of a sewage treatment plant.

The plans have lain dormant for the most part, however, because the WIC does not yet view the harbor condition as urgent.

The city has constructed several new storm drains to take some of this load off the old combined sewer system, and has sought federal funds for more storm drains, for bulkheading of Lermond Cove and for relocating its outfalls.

The city is also compiling a comprehensive map of all its own and private sewer lines and their tie-ins, no mean feat of detective work.

Neighboring Thomaston's St. George River is in serious trouble, sharing with its Mill Brook tributary at least 14 sewer outfalls, some from the town, the rest from Maine State Prison. The large clam flats in the river's big tidal bend, once among the finest in the state, are closed. Thomaston and state officials are studying a joint sewage treatment plant for the town and prison.

Camden has made a final \$56,000 survey in preparation for an estimated \$860,000 sewage treatment plant and sewerage improvement program to overcome its lovely harbor's long time pollution from the Megunticook River's woolen mill and tannery wastes and from river and harbor sewer outfalls.

Town officials say the WIC has provided a lot of help and they look for a start in construction of the treatment plant next year if full federal assistance is confirmed.

Belfast is digesting a heavy engineering report from Metcalf & Eddy, Boston civil engineers, recommending a sewage treatment plant and new sewers to pick industrial wastes to overcome the inner harbor's Class D condition. A city Water Improvement Committee has been organized to sponsor public information and support for the project.

Considering that most of their installations have been built within the past five years, the roster of Maine coastal communities with sewage treatment plants in operation today—13 plants in 11 towns—is worth taking a look at.

Most of the newer plants and their systems were planned and financed under the Federal Water Pollution Control Act with federal and state matching grants splitting 60 to 80 per cent of the cost, with the community financing the balance, usually through bonding.

The basic matching rate is 30 per cent federal and 30 per cent state. But communities in "depressed" areas have qualified for an additional 10 per cent federal grant, also matched by the state. The plants:

Kittery—Admiralty Village treatment plant, built in 1940, which serves about 1,400 persons. Despite its age, and earlier Imhoff Tank

design, this plant has an efficiency of 89 per cent suspended solids removal and 25 per cent biochemical oxygen demand reduction. Unfortunately it serves only about 10 per cent of Kiterry's people. The town and Portsmouth Naval Shipyard are discussing additional facilities.

Ogunquit—This resort town's new treatment plant has been sized to handle part of Wells' sewage. The \$385,000 plant, built last year, is part of a \$1 million Ogunquit Sewerage District program including interceptors, force mains and pumping stations.

Kennebunk—This town has two sewage treatment plants built in 1960 to arrest pollution of the Mousam River. The Water Street plant serves 1,400, and the Boothbay Road plant serves 630 persons. Both use a primary treatment process and chlorination.

Biddeford—This city has a \$750,000 treatment plant built in 1964 as part of a \$1,518 million program to stem this city's pollution of the Saco River. The city floated a \$400,000 bond issue to cover its share of the cost.

Saco—This small city has two treatment plants, an industrial plant built in 1962 and the Bear Brook Plant built in 1961. Together they serve about 2,900 persons. Additional facilities to handle the entire city are in final planning stages. Yet to be worked out, however, is a method to treat tannery wastes which contribute heavily to the Saco River's Class D condition.

Old Orchard Beach—A modern large treatment plant serving 6,600 persons built in 1960. Discussed earlier in this article.

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Scarborough—A small treatment plant built in 1963 to serve a shopping center area and to arrest pollution of the Nonesuch River. It serves a population equivalent of 293.

Cape Elizabeth—A small treatment plant built two years ago at Pond Cove to serve a school complex, stores and a housing development to reduce pollution of the Spurwink River. It utilizes an advanced secondary process.

Freeport—A primary treatment plant utilizing two Imhoff tanks and chlorinators. It was built in 1952 to arrest pollution of the Harra-seeket River and serves most of the town. The town's coastal waters and harbor have a B-2 rating and classification, however, indicating some pollution, probably from South Freeport's development.

Wiscasset—Has completed a \$300,000 treatment plant to stem the town's pollution of the Sheepscot River. The primary treatment facility is located on Sortwell Island and connected to the shore by a causeway.

Boothbay Harbor—Back in 1962 the waters of this famed harbor were rated "a low D" in pollution by the WIC—very poor. This sparked a \$1 million sewage treatment plant

and system improvement program. The harbor waters today meet their B-1 classification.

Two notable additions to coastal sewage treatment plants in the next year will be a \$1,008,000 facility at Brunswick, greatly reducing the town's pollution of the Androscoggin River (albeit a drop in the bucket considering the total pollution of this river, still unclassified by the WIC) and a \$345,000 treatment plant at Yarmouth, part of its \$683,000 program to arrest historic pollution to the tidal Royal River. Both projects began in May.

#### THE MATTER OF MONEY

Effective sewage treatment costs money. Towns of 5,000 population and lower can easily hit half a million dollars in a sewage treatment plant program, including interceptors, pumps and force mains, not to mention planning costs.

As communities get bigger, the costs of hooking them up to a sewage treatment plant, together with increased plant capacities, boost initial costs tremendously. Thus Portland officials, looking over their city's engineering surveys for sewage treatment, find such a project nudging \$20 million.

As the WIC points out in its 1965 report, limits on federal and therefore state grants have caused small communities with project costs within these limits to use them, while generating reluctance among cities.

The basic grant under the Water Pollution Control Act, passed several years ago by Congress to get things rolling, was 30 per cent of basic project costs up to a grant limit of \$600,000, with the state matching another 30 per cent and the community the remaining 40 per cent.

In certain areas the federal government would add a 10 per cent grant for accelerated public works purposes, also matched by the state, leaving the community only 20 per cent of basic project costs.

Recently Congress upped the federal grant maximum to \$12 million for any one project, also to be state matched.

Although the federal maximum grant for any single project has doubled, the federal authority has added little to its total allocation to the state for any one year. This has risen from \$1,252,100 to only \$1,412,060. The state's matching ceilings have been adjusted accordingly, and thus one single maximum grant could virtually use up the entire year's allocation.

This means just one large project could use up most of a whole year's federal allocation. Even these new limits, up to \$24 million if combined federal and state grants, are "peanuts" to a project the size of Portland's.

In addition to the Water Pollution Control Act, considerable supplementary legislation has been passed in Congress recently, allowing aid, much of it in 50 per cent grants, to

sewer system pipe installation not directly connected with treatment plants.

There is no direct federal aid to industries for sewage treatment facilities, a situation that is causing industries under cleanup orders to show more and more interest in purchasing sewage treatment services from community sewage treatment plants.

#### WHAT'S YOUR BRAND?

Maine's water improvement statutes provide five standards for tidal waters classification. They are SA, SB-1, SB-2, SC, and SD, the S used to distinguish them from freshwater standards which are similar but not the same. (When used in cases where tidal waters alone are discussed the S is generally dropped.)

Class SA—Suitable to all clean water uses, including swimming, shellfish harvesting, boating, fishing, etc. There must be no floating or settleable solids, oil or sludge deposits attributable to sewage or other wastes, no dumping or refuse, no discharge of sewage without primary treatment and disinfection, and no discharge or dumping of wastes of any kind in any quantity that would affect such waters' marine life or quality.

SB-1—The same uses and requirements as Class A but with a slightly higher allowable pollution count in shellfish growing areas.

SB-2—Suitable for boating and fisheries but not for swimming.

SC—Suitable for boating and fishing but not for swimming.

SD—The lowest classification, "shall be considered as primarily devoted to the disposal of sewage and industrial wastes without causing a public nuisance . . . by the creation of odor-producing sludge banks and deposits or other nuisance condition."

[From the Portland Sunday Telegram, July 10, 1966]

#### COASTAL POLLUTION PROBLEMS AND PROGRESS IN MAINE. PART II—THE EFFLUENT SOCIETY

Sewage is decidedly a sore subject in polite conversation. It isn't even nice to think about, let alone discuss, the biological or industrial wastes of modern American civilization.

And the incredible water pollution problems which are today arousing the United States are only a measure of the previous lack of consideration given this very basic fact of life.

Unless a house pipe or street sewer plugs up, or until a septic tank starts decorating the back yard, household wastes are neither a subject nor a problem to ponder. They are just drained or flushed away.

But where is "away"?

In medieval towns, as schoolchildren read with amazement and disgust, "away" was generally the nearest street gutter by means

of a well-aimed bucket. Rains did the flushing, if one was lucky enough to live on high ground.

Progress has been made. The engineering of modern gravity storm and sanitary sewer systems has reached tremendous development from its introduction just over a century ago. Perhaps its most notable achievement has been in the field of sewage treatment plants some of which, utilizing huge colonies of bacteria in normal but speeded up processes of nature, can virtually reduce raw sewage to drinking water.

Yet for the majority of Maine's cities and towns, progress has proved a relative thing. Their gutters are clean, but their rivers, harbors, or coastal shores are not. . . .

The City of Portland's "away" for a dry weather (no storm water) average daily load of 13 million gallons of raw municipal sewage, without benefit of treatment, is Portland Harbor, the Upper Fore River and Back Cove, the cove alone handling 30 per cent.

The City of South Portland's solution for its daily four million gallons of raw municipal sewage is Portland Harbor and its Main Ship Channel shore.

The City of Westbrook, with only 65 per cent of its population served by municipal sewers (vs. 90 per cent or more in Portland and South Portland) quietly dumps a daily average 658,000 gallons of raw sewage into the famous, or infamous, long-suffering Presumpscot River.

The Presumpscot's real claim to fame, however, is the 27 million gallons a day of industrial wastewater it receives from the giant S. D. Warren Co. paper plant in Westbrook, the region's largest industry by far.

The company now puts six million gallons a day of its wastewater through primary treatment to settle suspended solids, but discharges a further 21 million gallons untreated. And even in the treated six million gallons there's still the problem of lingering chemicals.

Cape Elizabeth, a pioneer of sorts, has built a small secondary sewage treatment plant at Pond Cove to handle schools, a housing area and a shopping center there, preventing pollution of the Spurwink River. But the town discharges enough sewage on its Main Ship Channel shores to bring advice from the Water Improvement Commission that another sewage treatment plant will be needed if the Fort Williams area is developed.

Falmouth Foreside's beautiful but thickly settled shore has been finding increasing problems with its convenient sewage discharge methods, a multitude of simple house and street pipes. And the town's rapidly growing shopping center area is taxing the limits of its ground disposal facilities.

Cumberland has a short mainland shore between Falmouth and Yarmouth, plus the

shoreline of giant Chebeague, Casco Bay's largest island. Although the town's pollution problems are mostly minor and in places non-existent, its Wildwood Park area sewage has been violating the SB-2 classification of that ocean community's shore.

Yarmouth citizens voted last November to float a \$450,000 bond issue as the town's share of the cost of a sewage treatment plant and interceptors to stop its heavy pollution of the tidal Royal River, a stream which has not looked very royal at close hand for many years.

On a bright, clear, windy day, the white-capped waters of Casco Bay, and even the murky waters of Portland Harbor, fairly sparkle and shine. They certainly don't seem polluted. Surely the tides and the ocean's nearness can take care of any pollution threat!

But if they can, why does the Department of Sea and Shore Fisheries forbid, and why has it forbidden for years, any clam digging between Yarmouth and Portland Head Light because of polluted shores?

If Casco Bay and its fresh Atlantic waters can "take care of" its daily dose of Greater Portland's sewage and other wastes, why are the shores of several Casco Bay islands unfit for swimming by Maine Water Improvement Commission standards?

Why is the west shore of Long Island, for example, classified SB-2, unfit for swimming?

Why is the ocean shore of Cushing, another sparsely settled island, classified SB-2?

Why is the sparsely settled eastern or ocean shore of Peaks Island classified SB-2?

Why does the Department of Sea and Shore Fisheries forbid clamming on all islands inside a line drawn from Waites Landing, Falmouth, to the most northerly point of Great Diamond, thence to the eastern shore of Peaks, thence to White Head on Cushing Island and from there to Portland Head Light,

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a line that takes in Little Diamond, Mackworth and House Islands as well, despite their proximity to deep ocean water?

Why are most of Falmouth's, Cumberland's and Freeport's shores fronting on Casco Bay classified B-2?

Actually, Casco Bay probably could dispose of this pollution—if it had the time. But as fast as the bay waters near Portland are dissipating their sewage load in deep water, it is being replaced.

Because the dissipation speed of Portland's smaller harbor waters is slower, because their volume is lower, their level of continuing pollution is much higher.

#### HOW TO ESTIMATE POLLUTION

Pollution in the case of sewage is measured by the Most Probable Number (MPN) of coli-

form bacteria in a 100-millimeter water sample (equivalent to six cubic inches)

Coliform bacteria are native to the intestines of humans and other warm blooded animals, and the degree of their presence in water is a reliable indicator of the presence and amount of sewage

The coliform bacteria are not particularly troublesome themselves, but their presence in water indicates the real possibility of the presence of the disease bacteria which live in the intestines of human "carriers." The deadly typhoid bacillus and the Salmonella group of bacteria which cause dysentery are two examples.

In polluted waters, clams and oysters are possible collectors of these disease organisms because of the large quantities of water they "siphon" through their bodies

Lobsters and other swimming fish are not affected this way because they do not ingest water as do clams and oysters

The Maine Water Improvement Commission designates its Class A waters as those which have or must be brought up to 70 coliforms or less per 100 ml sample

The B-1 classification is for waters with an MPN count of 240 or less, and B2—waters with an MPN count of 1,000 or less—is considered by the commission as unfit for swimming.

There are no MPN minimums for the C and D classifications, the latter being designated for water into which sewage may be discharged so long as it does not become a "nuisance." Portland Harbor and its adjacent waters are classified C and D

The Water Improvement Commission found some interesting, not to say disturbing, MPN values when it surveyed Portland Harbor in 1957 and 1958, taking samples at 12 stations at varying stages of tide.

The readings, in order, generally represent high tide, half tide and low tide. The values are noted here because nothing has been done to reduce pollution conditions since they were taken.

Station 1, Congress Street Fore River crossing, 150 to 64,000 to 93,000 MPN coliform counts; Station 2, Thompson's Point, 93, 39,000, 110,000; Station 3, Veteran's Memorial Bridge, 230, 23,000, 15,000; Station 4, Portland Bridge, 430, 23,000, 24,000; Station 5, inner harbor mouth near Portland side, 430, 43,000, 93,000; Station 6, Fish Point, off Fort Allen Park, 150, 2,300, 46,000; Station 7, off Cushing Point South Portland, 43, 93, 46,000; Station 8, Tukey's Bridge, 230, 43,000, 110,000; Station 9, mouth of inner harbor near South Portland shore, 390, 4,300, 110,000; Station 10, in cove near South Portland City Hall, 230, 3,900, 1,100,000; Station 11, off Turner Island, South Portland, 230, 2,300, 46,000. Station 12, Veterans Memorial Bridge, South Portland side, 230, 4,300, 460,000.

It is the continual input of these bacteria from a consistently large sewage flow that produces large counts, even though the disease organisms they warn of die in a matter of hours

Receiving waters have quite a battle considering municipal sewage at outfall averages 50 to 300 million MPN per half pint sample.

#### RATS BY THE THOUSAND

Besides direct contact dangers and the travels of interested insects, Portland's gushing waterfront outfalls produce another continuing disease danger: Rats, thousands of them.

Battled but never quite conquered by rodent control campaigns, they are so well fed they just aren't too interested in the poisoned bait proffered by the Health Department.

The rats are thriving on two principal food sources, reports Health Department chief sanitarian Neal D. McDowell. One of them is as old as the waterfront and the other the result of modern household kitchens.

The historic and still generous food source is the droppings of fish and meat scraps from the Commercial Street waterfront food processing concerns. The new source is the garbage disgorged by the "electric pig" disposal units of kitchen sinks.

An August, 1965, survey of resident rodents by the Health Department turned up sightings and signs of large colonies at Portland Terminal Co. Wharves 1 and 3, Snodgrass, Brown's, Merchant's, Merrill's and Union Wharves, and small nests at Custom House and Widgery Wharves

The same survey also found rats nesting near and patronizing several Back Cove outfalls, presumably for garbage scraps from many nearby homes. There was considerable infestation of the Baxter Boulevard shore between Dartmouth Street and Vannah Avenue, and smaller nests at other outfall areas.

Small rat colonies were also reported at East Deering's Presumpscot Estuary back shore and at points along the upper Fore River.

The growing pollution of the anchorage area near Portland's East End Bathing Beach, caught between the ebb and flow of currents from the City's inner harbor and Back Cove, caused the Health Department to urge closing of the beach to swimming two years ago. A freshwater pool has been built at the popular beach area as a substitute.

The controversial closing was voted by the City Council after beach tests showed the water bacteria count was not being reduced by chlorination of a nearby outfall thought to have caused the condition.

South Portland's small but pretty Willard Beach, a city park which fronts on the main harbor entrance just east of Fort Perble, is the only Portland Harbor area beach still open to public swimming

The beach, which was given a "C" rating by

the Water Improvement Commission in 1958 tests (two ratings below WIC safe swimming standards) continues open because of a staunch, consistent, and somewhat controversial stand, with City Council backing, taken by South Portland city health officer Dr Philip P. Thompson Jr.

Dr Thompson does not deny the presence of pollution conditions at the beach, though he feels and tests seem to show that ocean waters coming up the main harbor entrance keep the beach waters fairly clean compared to the inner harbor and anchorage.

The WIC station tests off the beach, for example, ranged from an amazing low MPN coliform bacteria count of 43 per sample up to a high count of 46,000 per sample. But he firmly rejects any parallel between the pollution danger to shellfish or to drinking water, and the pollution danger to swimming.

Rarely, if ever, "and in no case that I've been able to learn about," has an individual or group outbreak of pollution-caused disease, such as typhoid or dysentery, been traced to a swimming cause. Instead they are almost without fail traced to food handling "carriers," drinking water, or polluted clams or oysters, he says.

For this reason, declares Dr. Thompson, "I would be as strict as anyone where pollution of drinking water or shellfish is concerned."

Dr. Thompson feels that even with high coliform counts, a person would have to swallow large amounts of water to run the risk of ingesting a possible disease germ, and people swimming would not swallow anywhere near enough water to make this a possibility worth worrying about.

#### WORSE EVERY YEAR

Getting back to Portland Harbor itself, Capt. Linwood F. McLain, who until recently headed the board of harbor commissioners as chairman, agrees the sewage pollution problem is serious, "and it's getting worse every year.

"Our two cities (Portland and South Portland) have been taking the easy way out with their sewage for a long time, and the harbor shows it."

The harbor commissioners, two Portland and two South Portland men appointed by the Governor to oversee and control such activities as pier construction, dumping and landfill, and to investigate certain types of pollution such as oil spillage, are specifically prevented from having any say about municipal sewage disposal into the harbor, notes McLain.

Indeed, the commissioners' authority to fight other types of pollution is not specifically spelled out.

Because of steadily increasing pollution complaints from waterfront interests, and because of some recent cases of "lack of co-operation" by some industrial polluters, the

harbor commissioners have sought and are awaiting clarification by the state attorney general of their power to compel cooperation.

But it's a pretty good bet that any individual polluters the harbor commissioners start clamping down on would ask in court why they are being prosecuted while the sewers of two cities, one the state's largest, are exempt from forced cleanup.

[From the Portland Sunday Telegram]

COASTAL POLLUTION: PLANS ALL READY—It's JUST MONEY THAT'S NEEDED

Portland, South Portland and Westbrook have before them and are studying comprehensive civil engineering recommendations and plans for construction of modern sewage treatment plants and their interceptor systems. The big question is money, not need.

If built, they could reduce by approximately two-thirds these cities' daily sewage strength now going into the harbor waters, and even the remaining sewage effluent from these plants could have virtually all its bacteria killed by chlorination.

Because the three cities, as in the case of most cities, each have combined sewer systems which take care of storm drainage as well as sanitary sewage, there would still be the need to dump some raw sewage during storm flows too big for the treatment plants to handle.

This is a built-in handicap of combined sewer systems when it comes to sewage treatment, but the alternative of laying in a new separate sanitary sewage system entailing the ripping up of nearly every city street, would be incredibly costly.

Raeburn W. MacDonald, chief engineer of the Maine Water Improvement Commission, emphasizes that dumping of some raw sewage during a storm period, "still represents a big net gain over a situation where dumping is constant, day in and day out, not just occasionally."

It would be much more easily dissipated by the receiving waters, but the WIC would allow no more than a "C" rating for the receiving waters though they might be much cleaner than this between storm periods.

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The following are summaries of plans and costs for cleanup, including those by the S. D. Warren Co. to further reduce its still tremendous wastewater loads on the Presumpscot River.

#### PORTLAND

When it comes to pollution abatement challenges among Maine cities, Portland bats in a league of its own. But the big town hasn't stepped into the batter's box yet. It's waiting to see if the federal government will pitch more pollution control money across the plate.



A year ago last April, the Boston civil engineering firm of Metcalf & Eddy laid before the city the most exhaustive pollution abatement study and plan Portland has ever had.

To make a 215-page report short, the plan recommends a \$19,550,000 eight-year program to construct a \$4.3 million primary sewage treatment plant of 16.5 million gallons per day capacity at the city's East End.

The balance would be \$15,250,000 for construction of pump stations, interceptors, force mains and repairs to old mains for the first and last roundup of Portland's 45 principal sewer outfalls, bringing their daily 13 million gallon discharge to the plant.

Of the larger outfalls, 13 are in Back Cove, 27 in the harbor, and five at the Presumpscot estuary.

The city has accepted the study as its long range working plan but no major construction works have been authorized for it yet.

The program is expensive because of Portland's far-flung numerous sewer outfalls and many complexities of elevation for sewer construction of any kind, plus the large treatment plant needed.

It is also costly because federal water pollution control assistance to cities Portland's size has been quite limited.

A number of small Maine towns have received 60 to 80 per cent matching federal and state funds for their sewage treatment plant programs, but the basic federal grant has a \$12 million ceiling (formerly \$600,000) for any one project and only slightly more than that, a total of \$1,412,060, in any one year allocated to Maine.

Recent federal legislation has come up with 50 per cent subsidies for certain types of sewer work indirectly as well as directly related to sewage treatment plant projects.

But Thomas F. Griffin Jr., Portland's public works director, is far from impressed with overall federal pollution control assistance to date.

All the assistance Portland can depend on at present would be about \$6,714,000 in both federal and state aid, or 35 per cent of Portland's program cost.

Griffin notes that since 1956 federal assistance to communities for water pollution control has totaled about 14 per cent of the cost. A contributing factor to this, he charges, has been the "fragmentation" of federal pollution control programs into many agencies and categories, defying a really unified approach to the problem.

"I feel federal assistance in this field, as it is for highways, should be on a 90-10 per cent basis with the state and communities splitting the 10 per cent," declares Griffin. "I also think the ceiling on the total grant for a project should be removed."

He would further like to see the restriction of federal funds from combined sewer con-

struction removed, arguing that separating sanitary sewers still leaves large pollution loads in storm drains.

"The total cost of such assistance would be huge," he admits, "but it would be small in comparison with our resources, and as a nation we can afford it. And the water pollution control programs we need in New England cannot be met by adding them to an already onerous property tax burden."

Griffin thinks that a bill from Sen. Muskie now under Senate study is "a step in the right direction." It calls for 50 per cent federal project subsidies if they are matched by 30 per cent state participation.

"Until the federal government starts showing pollution control programs the kind of support it has seen fit to give highways, airports and the like, my inclination and advice for large communities is to do nothing till we get some action."

Metcalf & Eddy recommend in their study that Portland consider paying off the unsubsidized balance of its project by a combination of general obligation and revenue bonds and that a sewage service charge be established to pay system operating costs and liquidate the revenue bonds, thus keeping any tax hike as low as possible.

#### SOUTH PORTLAND

South Portland this month will receive a comprehensive sewage treatment study and plan similar to Portland's from Boston civil engineers Fay, Spofford & Thorndike.

As outlined by Kenneth Neipert, superintendent of sewers for the city's Public Works Department, the South Portland program calls for a modern four million gallon a day primary treatment plant on filled land adjacent to Waterman Drive and across it from the foot of E Street.

The city will be working on target date of April, 1969, for completion of the plant and its interceptor lines, pump stations and force mains.

The cost of South Portland's pollution abatement program will be close to \$4 million, including an estimated \$1,125,000 for the treatment plant and the rest for rounding up the city's more than 20 principal outfalls, most of them along its harbor entrance and inner harbor shores below Portland Bridge.

Three major pump stations will be needed, plus eight smaller pump stations to drive sewage over high ground through a force main. Three existing pumping stations on Western Avenue will continue to handle that area.

South Portland is fortunate in that it is already well over 90 percent sewered, and in the fact that all the sewers in the city's western section are now tied into the Turner Island outfalls, making it fairly simple to run an interceptor the short distance from there along the shore to the treatment plant site.

If the cost of the overall project does come to \$4 million and if all its phases are eligible for the basic 30 per cent federal and state matching subsidies, South Portland should get the full amount possible from these combined subsidies—\$2.4 million.

#### WESTBROOK

The former Westbrook Sewerage District received a city plan for sewage treatment last November from the Boston firm of Camp, Dresser & McKee. A month later the Sewerage District was voted out of 10 years' existence in a city referendum and replaced by a city-operated Westbrook Sewerage Commission. But the plan still holds, though none of its projects have yet been scheduled for a start. Indeed, the City Council in June dropped plans for an initial \$95,000 treatment plant reverse account allocation by the city.

The plan calls for a \$1,130,000 primary sewage treatment plant on the Presumpscot River in the city's Haldon section about half a mile below S. D. Warren Co. on property the city purchased for this purpose several years ago.

The big settling tanks of this plant are to be supplied with city effluents by north and south bank interceptor lines picking up the city's 24 sewage outfalls in the Riverbank Park area, and with the help of a pumping station and force main at Cottage Place and an interceptor downriver to the plant.

Total project cost is estimated at \$2,549,000, of which engineers estimate the city would have to pay about \$1 million.

Camp, Dresser & McKee also recommended a Phase II project totaling \$337,000 to connect Prides Corner section to the treatment by means of interceptors on East Bridge Street and Haldon Road and a pump station, but the firm advised that this phase would not become urgent until population of this section grew a lot more.

#### S. D. WARREN CO.

How do you handle the insatiable seas of waste-laden water that are the relentless by-product of round the clock papermaking? And if you can sift out much of the solid waste, what do you do with it?

These are a couple of problems which S. D. Warren Co. of Westbrook, a major Maine paper mill and the Portland area's biggest industry, was content to let the Presumpscot River find answers for over a period of several decades. Then came the river's revolt.

In the sultry summer of 1959, the deep, barren mud flats in the Presumpscot's tidal section and estuary began giving off unprecedented quantities of hydrogen sulfide gas, quantities strong enough to blister and discolor the paint on many houses near the estuary.

Amidst the ensuing uproar, the Maine Water Improvement Commission commissioned a \$25,000 survey of the Presumpscot's fragrant

foulness. The resulting 1960 report from Camp, Dresser & McKee, Boston civil engineers, painted an awesome picture.

Below Westbrook, the report said, "the bed of the river was covered with a layer of slime and mud varying in depth from a few inches to five feet. No signs of aquatic plant growth or fish life were to be noted.

"Frequently the river is covered with a layer of foam which results in a rather unsightly appearance . . . Numerous gas bubbles are seen rising over the entire surface of the river and occasionally bottom deposits rise to float on the surface. . . .

"The nuisance conditions in the Presumpscot River and estuary are caused primarily by the presence of organic matter in the wastes and sewage discharged to the river which is fed upon by bacteria in the water and bottom muds. The bacterial feeding process depletes the dissolved oxygen . . . to such an extent that septic decomposition sets in with a liberation of gaseous byproducts, including sulphurous gases. . . ."

The river was tossing the tremendous waste disposal problems of a big industry and small city back into their laps.

In the six years since this report, things have started to improve for the lower Presumpscot, though perhaps not enough for the casual eye or nose to notice.

As George Bennett, S. D. Warren's candid engineer director of stream improvement aptly puts it, "We've come a long way since then, but we still have a long way to go."

S. D. Warren found that a major source of the organic matter in its mill wastes was in tiny wood fibers. This led to installation of filter screens which by 1964 were collecting 17 tons of fiber daily, and up to 37 tons of total fiber and clay particles.

Also since 1960 the company's papermaking methods have changed from the soda to the Kraft process, which with water reuse techniques has dropped the company's daily wastewater discharge from 42 million gallons per day to between 27 and 30 million.

The firm's first true waste treatment facility as such went into operation this year. It is a primary treatment plan based on a 280-foot diameter three million gallon capacity cylindrical concrete tank.

With the five largest of the company's 13 giant paper machines piping their wastewater into it, six million gallons a day, the huge clarifier works as a giant settling pond.

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At its present rate, the clarifier is handling half the mill's process wastewater (from actual papermaking) and it has a designed capacity for 20 million gallons a day.

Whether secondary treatment of this water to reclaim its dissolved and remaining undissolved solids may be needed in the future

will probably be determined by the Water Improvement Commission's recommendations to the next Legislature for the lower Presumpscot's classification.

Yet the company's new primary treatment plant is a mixed blessing when it comes to operation.

First there is the trouble of picking up the plant's numerous waste outfalls by a system of interceptor pipes and pump stations. As this process proceeds, some wastes will have to be handled and treated separately from others if they are to be successfully reclaimed.

The other headache, an awesome one where such high volume, around-the-clock production is involved, is what do you do with reclaimed wastes for which no use is readily apparent? You can't continually buy land to dump or bury it on after the drying process.

Then there's the problem of the cost of such waste reclamation, \$900,000 to date, an expense that must be met out of profits, not out of a surcharge on the product that would immediately lose sales to the competition.

The rebelling Presumpscot has tossed S. D. Warren some real problems—and challenges.

[From the Portland Sunday Telegram, July 10, 1966]

#### PORTLAND STUDIES VARIED DISPOSAL COMPLEX IDEA

(By David C. Langzettel)

Portland City Hall is working on a project for solving Portland's garbage, trash and sewage problems with a single disposal complex that would be largely self-sufficient.

It might even pay its own way some day, according to Public Works Director Thomas F. Griffin Jr., who came up with the idea as chairman of a waste disposal committee.

It's never been done before to Griffin's knowledge. For that reason he's trying—so far without success—to get federal aid to build the \$6.5 million complex and a demonstration grant to help start its operation.

The complex would handle all wastes, produce power to run itself and also produce salt and slag byproducts worth more than \$1 million a year.

The process also would turn out more than four million gallons of fresh water a day. For a city near Sebago Lake, making water is like shipping coals to Newcastle, Griffin concedes. But it has its use in the process.

If all this sounds like a Rube Goldberg perpetual motion scheme, a few minutes of explanation from Griffin put a new light on it.

Even if the complex as Griffin conceives it never has been built, all its parts have. And they all work.

"Putting this monster together—balancing the parts— isn't going to be simple," Griffin

says. "But I've asked the Planning Board to start thinking about budgeting for it over the next few years. Perhaps we can get federal aid later on."

Basically, Griffin's "monster" has three elements: a sewage treatment plant and a big incinerator—as close together as possible—and a huge garbage grinder ("an oversized pig, if you will") installed in a sewage pumping station.

Theoretically, federal aid for each of these elements is available. And it seems obvious to City Hall that putting them together and gaining self-sufficiency will save money for Portland and the government.

Yet simply because the elements are integrated, Griffin says, individual federal departments apparently take a dim view of the project and "so far they refuse to get involved in each others' bailiwicks."

Briefly, elements of the process work together this way.

Garbage would be trucked to the pump station, ground and then injected into the sewer system with other wastes.

Raw sewage, with the garbage in suspension in it, would flow to the treatment plant, where floating solids would be skimmed off and settled wastes scraped together. This material would be conveyed by pipe to the incinerator to be dried and burned with trash and construction scrap.

Griffin would use walls containing circulating water to insulate the chamber. Heat from burning trash would turn some of this into steam to turn a turbine that would provide the small amount of power needed to run the entire complex.

Excess heat would be applied to salt water in stills, to produce the salt byproduct. Residue from burned materials (about 25 per cent) would be reduced to slag that would be useful in road construction.

The stills also would produce fresh water after removal of salt from the ocean water, which would go back to the treatment plant to dilute the effluent, or treated sewage, before pumping into Portland Harbor.

The only exhaust from the incinerator would be cleaned hot air.

Griffin estimates the plant would produce 50,000 to 100,000 tons of salt a year. The city uses about 4,000 tons a year on roads. So the remainder, at \$14 a ton, could bring in \$1 million or more every year, he suggests.

Griffin gives this cost breakdown on the complex: treatment plant, \$3.5 million, incinerator, \$2 million, and garbage grinding unit, \$750,000.

Using a \$6 million round figure and assuming 50 per cent federal aid and 30 per cent state, Griffin estimates Portland's share for the complex at \$1.3 million. "Or you could call it the cost of two Bramhall Fire Stations."

Of course, this isn't the complete cost of an integrated pollution control system.

Portland has made a start on a treatment system by installing sewer interceptors along Marginal Way. And the city has built pump stations at Franklin and Riverside Streets. But another \$16 million worth of interceptor sewerage would be needed to tie all city sewers into a plant.

Here the city is up against the federal government's chicken-or-the-egg proposition: you can't get federal aid for the interceptors until you have a treatment plant. Hence, Griffin's plan is being advanced now.

"We'd simply have to start the treatment end of the operation in a small way with what interceptors we have, then apply for federal aid for the rest," Griffin says.

Griffin has several ideas for cost cutting. One is to charge an incinerator fee to other area communities, which would find it cheaper and more convenient than the dumping system they're using now.

Private trash collectors also could use the burner on a monthly fee basis. And even individuals with a trash overflow between collection days might use it for a small fee.

Griffin also sees potential for similar operations in other cities, especially those lacking a good fresh water supply. Even the federal government might benefit directly, he says.

"For example, take Guantanamo Bay (the U.S. naval base in Cuba). They make their own water. I don't know what they do with their salt—perhaps they waste it—or whether they have an incinerator. But I think waste heat from burning trash could be used there."

Federal demonstration grants generally are approved for a project because it is unusual or unique and could serve as a model for other communities.

Griffin can't understand why Portland's plan wouldn't benefit others and save the federal government money to boot.

The idea originated more than a year ago when City Manager Graham W. Watt named Griffin to head the committee studying the garbage disposal problem. It's now collected and trucked to pig farms. The city has both wet and burning dumps for trash and pumps raw sewage into Portland Harbor.

A Metcalf & Eddy engineering study indicated in 1959 that a treatment plant alone would cost about \$5.3 million. And the committee knew an incinerator would run at least \$1.6 million.

Griffin knew ground garbage had been handled by treatment plants. But a treatment plant for sewage alone was too expensive, he felt.

His key cost-cutting idea was to combine processes so that sewage solids could be skimmed off and burned. This would reduce the treatment cost substantially and add

only slightly to the incinerator bill.

The committee settled on a peninsula site for the complex, "somewhere between Commercial Street and Marginal Way, probably at the old dump area or on the harbor side near India Street."

To build at the former site of the East End dump would involve only the cost of digging out settled trash. But this would be an unpopular move in some circles because of recent recreation development on the Promenade, Griffin feels. On the other hand, the India Street site could be expensive to buy and develop.

The garbage grinder could be at the Franklin Street pumping station or at either of two proposed pumping stations, near Commercial and India Streets and near the dump.

With these matters decided, Griffin drew up some sketches and a written proposal which was forwarded last September to U.S. Sen. EDMUND S. MUSKIE.

The committee also filled out a so-called preliminary inquiry form for federal aid, which in itself indicated the going might get rough.

The form originates with the Bureau of the Budget. But it also goes to each of the following departments for perusal: Housing and Urban Development, Agriculture, Farmers Home Administration, Health, Education and Welfare, Commerce, Interior, and Economic Development Administration.

The form was filed last December. So far city officials have had no reply.

"I'm not even sure what sort of reply we're supposed to get, one way or the other," Griffin says. "But I understand that Sen. MUSKIE is interested and doing what he can to stimulate some interest."

Even if the federal wheels do begin turning, the city isn't sure how much aid it could expect to get in view of Maine's very small allocation for anti-pollution measures.

The idea of issuing bonds to cover construction costs is intriguing to city officials, Griffin says, because the operation would be partly self-sufficient to begin with and could pay for itself after a time.

[From the Portland Evening Express, June 27, 1966]

#### CLEAN WATER

Senator EDMUND S. MUSKIE speaks on few subjects with more authority or conviction than on the matter of air and water pollution.

So the note of urgency in his message was not unusual when, in a recent speech in Maine, he expressed the hope that Maine would take advantage of a measure now making its way through the Senate. It is a \$6 billion federal aid program. If approved, it would supply 50 per cent of the cost of a community pollution control program if the city would supply 20 per cent and the state

the remaining 30 per cent.

The Senator cited impressive statistics on the water needs of the nation in the coming

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years and pointed out that Maine has a good supply of fresh water and that the state's economy has benefited from it.

"We must guard this resource. We must realize our potential. We must preserve our good water and clean up our soiled water," he said.

That has a good oratorical ring to it, to be sure. But it also has meat. Maine is deeply concerned about its economic development. The effort to attract industry deals with the complete need, quite properly, considering recreational, cultural, social and educational resources of a city or region. From the standpoint of employee contentment, that good supply of fresh water may also become increasingly important as well as for direct industrial use.

It may well be that in another 10 or 15 years, a good supply of fresh water may be more important than facilities for graduate study, a symphony orchestra or even the labor environment.

The long range view in economic development suggests that Senator MUSKIE is not overemphasizing if he sounds urgent in telling Maine to clean up its dirty streams and protect those water supplies still reasonably clean.

[From the Portland (Maine) Press Herald, July 1, 1966]

#### SENATOR MUSKIE IS FORCING CONGRESS TO ENACT ANTIPOLLUTION MEASURES

There are times when it almost seems as if Democratic Senator EDMUND S. MUSKIE is the only person who is pressing ahead powerfully on the anti-pollution front.

This is, of course, not true—the sheer economic loss sustained through the dirtying of the nation's water supplies is now well recognized, he is recruiting new allies daily, and the American people increasingly will see efforts made toward the Senator's goal of clean waters.

But the magnitude of the task is appalling—figures like \$40 and \$50 billions are being tossed about—and there is so much to be done that billions can be spent before water pollution can even be checked. And this excludes, of course, the air pollution that plagues all of America's larger cities.

Yet under Senator MUSKIE's guidance, the tools are being shaped at Washington for the role the federal government must play in pollution abatement. Last year Congress approved the Clean Waters Act establishing pollution abatement as a national policy. Recently the Senate Public Works Committee voted out, with powerful support in the Sen-

ate at large, a bill for a six-year program, and \$6 billions in money, to help the states and municipalities build sewage systems and waste treatment facilities.

The bill combines some of the approach sought by the Johnson Administration, but chiefly this is the Senator's bill and is so recognized at Washington. There is a million dollars for the study of estuary pollution, bringing to mind the problem of Greater Portland's Presumpscot river. There is a larger program for demonstration projects in treating sewage. There is authority letting the government control oil discharges into the ocean from shore facilities as well as from ships. The former \$12 million limit on federal grants for individual sewage-treatment projects is abolished, with Washington still contributing 30% of the total cost.

An important feature of the bill deals with entire river basins, an objective of the administration bill. Under MUSKIE's bill, planning agencies would be set up and given three years to develop a plan, for both intrastate and interstate rivers. When a full-fledged plan is approved by the Interior Department, the federal contribution will be 50%, with the state's share 30% and affected municipalities only 20%. This "sweetener" should hasten entire river-basin anti-pollution projects, under standards for cleanliness set forth in the bill.

If Congress acts favorably, as we hope it will, we can get the anti-pollution show on the road, and then a great burden will fall upon the people of Maine, their city governments and the legislature. The current predicament of the town of Falmouth, where pollution is a pressing problem, typifies the expensive measures that must be taken in the foreseeable future. With federal and state aid, and the good work being done by the Water Improvement Commission, Maine is in a position to show the way to the other states.

[From the Waterville Morning Sentinel, July 2, 1966]

#### THERE'LL BE NO CLAMBAKE

Those shallow areas along the Maine coast that are known as clam flats have been plagued for some time by that residue of civilization, pollution.

Latest to suffer are the productive flats in the Searsport and Stockton Springs area which were closed yesterday because of the high bacteria count that has resulted from the pollution of the coastal waters in the vicinity.

An effort is now being made to see what can be done to restore the flats by eliminating the pollution or at least reducing it to acceptable levels.

It now appears that the best hope of ac-

completing something is under a law passed by Congress at the behest of Senator EDMUND S. MUSKIE. Senator MUSKIE has become the leading advocate in Congress of anti-pollution measures.

Those of us who reside inland are inclined to think of pollution as primarily a river problem.

It isn't. These polluted rivers empty into the sea and where they empty they deposit their filth in such quantity that even the mighty ocean can't cope with it. And there is an increasing amount of direct pollution along our coast line.

Certainly, one hopes that something can be done to correct the Searsport-Stockton Springs problem as quickly as possible. In the long range one hopes that something will be done to prevent other situations like it.

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[From the Lewiston Daily Sun, July 4, 1966]  
LANDMARK CASE IN THE MAKING

The closing of valuable clam flats in Belfast, Searsport and Stockton Springs may result in a landmark court case, under a new federal law. This is the first time since such areas have been closed due to pollution that a law is on the books which may offer redress to the clam diggers whose livelihood is affected.

Action to close the flats was taken after tests showed that the bacterial count was higher than allowed by the U.S. Public Health Service. As Sea and Shore Fisheries Commissioner Ronald W. Green explained at a public hearing, the state has no choice but to close areas where pollution surpasses the standards set by the agency. At the same public hearing, it was brought out that the offending pollution comes in part from communities along the Penobscot River and in part from poultry processing plants in Belfast.

At the request of the commissioner, Gov. John H. Reed has written Secretary of the Interior Stewart L. Udall, whose department is charged with enforcing the law relating to pollution of tidal flats and waters, to see how it can be applied in Maine.

The law, sponsored by Senator EDMUND S. MUSKIE of Maine, by the way, may allow the diggers to sue communities and corporations polluting the waters. Last year, the 65 diggers involved conducted a \$200,000 business on the clam flats which have been closed.

In addition to possible redress in court, the federal law also may bring assistance in the way of federal technical studies and financing to restore the flats for commercial use.

If the Muskie law proves as effective as intended, pollution control will be given a big push, while those who are victimized by pollution will find needed assistance.

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[From the Portland Evening Express,  
July 6, 1966]

#### FOULING OUR OWN NEST

The Sunday Telegram is delivering a two part Sunday punch in a pair of articles on our pollution of our coast.

This past Sunday the Telegram stated; "The neighboring cities of Portland, South Portland and Westbrook daily dump all their municipal sewage untreated into Casco Bay."

In odiferous addition to this filth disposal, says the Telegram feature, the cities add the industrial wastes of a major paper mill and the refuse from numerous fish and meat processing plants along the waterfront.

The result is that Casco Bay enjoys the worst possible water rating.

These waters are filthy.

So filthy that in the language of the Water Improvement Commission the waters of Casco Bay "shall be considered as primarily devoted to the disposal of sewage and industrial wastes. . ."

Beautiful Casco Bay gets the classification of D.

And "D" stands for Dirty.

"D" stands for Defilement.

"D" stands for Desecration.

"To dirty; to defile; to desecrate" . . . this is how Webster's Dictionary defines "pollution."

Portland's polluted Back Bay is a giant open tidal sewer in the middle of the city.

The measuring stick for water filth doesn't go low enough to classify it. The Sunday Telegram states Back Bay can't even stagger up high enough to reach a class D rating.

These are remarks made in passing about Portland Harbor. The first of two Sunday Telegram articles reported on the whole coast.

But this coming Sunday, the Telegram takes a close-up look at Portland, exclusively. Its spotlight will glare on the way we are fouling our own nest

Faced with these noisome facts, we hope the public outcry will be loud enough to trigger off a too long delayed cure.

Maine's Senator MUSKIE is the man leading the fight in Washington to combat pollution. What better springboard than Maine's biggest city?

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[From the Waterville Morning Sentinel,  
July 7, 1966]

#### THE TIDE WON'T CLEAN IT UP

It is generally conceded, in the newspaper business, that a good many news stories, regardless of their significance, go unread during a three-day Fourth of July holiday. Most people are on the move, occupying themselves with other matters.

But on Sunday our contemporary, the Sunday Telegram in Portland, published the

first of two articles on maritime pollution, and we urge those who may have skipped lightly over it, or ignored it, to exhume the paper and read the article thoroughly.

The staff writers' research is thorough and well-documented, the story they reveal of the defilement of the Maine coast is shocking.

The impact is all the more devastating when one remembers that Maine has a coastline of more than 2,500 miles, and that a large proportion of the state's great throng of summer visitors spend their time at resorts

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and communities along the Atlantic shoreline. It is beautiful, it is largely uncrowded, but alas, much of it is badly polluted.

All of us here in Maine know why. Scores of Maine rivers and streams, emptying into the sea, have been used as sewers from time immemorial. It used to be assumed that since the ocean was so vast, and the twice daily tides so powerful, that the salt water absorbed this enormous mess of industrial and human sewage.

But with more than a hundred valuable clam flats closed to digging because of pollution, we now know that the tides leave a good deal to be desired as cleaning agents. This is an economic loss—the recent closing of clamming areas near Belfast recently shut down a \$200,000 a year business—but the tourist industry will suffer far more if severe pollution reaches numerous beach resorts. Old Orchard Beach narrowly escaped disaster not long ago, and the lesson learned there has been profitable to others.

Yet there is much more to be done, with reference to the coast alone, and the state must be made ready to take advantage of increased federal aid, if Sen. EDMUND S. MUSKIE can force his new "clean waters" bill to enactment. In relation to many other states, Maine is fortunate, but there is apathy and inertia to overcome, and the Telegram article will help mold public opinion in the right direction.

[From the Portland Press Herald,  
July 8, 1966]

#### TELEGRAM'S REVIEW OF POLLUTION OUTLINES PROBLEMS STATE FACES

The Sunday Telegram, in a manner of speaking, is in the process of delivering a one-two punch on the issue of coastal pollution.

Last Sunday its staff writers assembled a shocking exposure of pollution of the Maine coastline, naming the towns and cities that have recognized the problem, to do something about it. For those who have acted, it must be admitted, it was not so much a matter of conscience as one of economic necessity.

Next Sunday the Telegram will reveal "A

Portrait of Portland," and residents of the area had better brace themselves for a disconcerting and disagreeable picture. This is the most heavily populated and industrialized part of the state, and every day its communities are pouring a vast amount of industrial and human sewage into Casco Bay.

The worst conditions are found in Back Cove and Portland Harbor, and only last week the Board of Harbor Commissioners publicly assailed the filthy conditions allowed to exist adjacent to this "beautiful city by the sea."

Very little has been done because of the cost of sewage lines, pumping stations and treatment plants. Yet if Sen. EDMUND S. MUSKIE succeeds with his new bill aimed at more generous federal financial aid in pollution abatement, Greater Portland must prepare to take advantage of it. It is ironic to see civic leaders boasting that more than \$20 millions will be spent on a new expressway, but ignore the befouling of Back Cove and the harbor. Perhaps the forthcoming Telegram article will change the present mood of apathy.

[From the Portland Sunday Telegram,  
July 10, 1966]

#### GOD'S SEPTIC TANK

If the fish in Jake Day's cartoon would take off those gas masks and write this editorial, we'd get a horrifying first-hand story of what it feels like to be "polluted"—by sewage dumped into Maine's coastal waters.

Today the feature section of the Telegram focuses on the problems of pollution in the Portland area. Last week the Telegram spotlighted the problem along our entire coast.

The wholesale dumping of uncountable tons of human and industrial waste into the ocean clearly implies that Man treats the ocean as a septic tank provided by God.

Thanks in large degree to the arduous work done in Washington by our own Senator MUSKIE, Man is now belatedly trying to correct the situation.

Wholesale dumping is an expensive mistake to correct. Across the nation, in the rivers as well as along the coasts, it may cost billions of dollars to correct present pollution and to prevent future increased pollution.

The first steps—faltering sometimes, over strong opposition always—have been taken. New homes bordering on the ocean can no longer use the cheapest way of getting rid of their waste—a rusty pipe to the sea. But "grandfather clauses," with very long whiskers, permit high priced homes to act still in a pretty low-class way.

Doctors tell us that swimming in sewage polluted waters has not to their knowledge caused death, or even desperate illness.

We are inclined to attribute this good news more to the fact that swimmers get

out of the way than to any kindly quality in the sewage.

Without deaths and disease, the penalties of pollution may lack the drama which triggers public action.

We all oppose pollution violently—right up to the point where its cure spells taxes. Right up to the point where preventing pollution before it starts leads to the threat of a loss of immediate jobs.

And so through positive nonaction the problems grow larger and the future cure grows more costly.

Speaking of cost, it is a fact that pollution in our rivers and along our coastline is costing and has been costing us millions of dollars in Maine.

Pollution has closed clam flats and thrown men out of work. It is still doing this.

Here we want to emphasize that every Maine clam which goes to market today is a fine, clean, pollution free clam. Sea and Shore Fisheries day after day check scientifically to ascertain there is no pollution in the beds being dug. Equally, Sea and Shore firmly closes beds where pollution threatens them. You can eat Maine clams and be wholly safe.

Senator Muskie's new Water Pollution Control Act and the Clean Rivers Restoration Act provides up to 30 per cent Federal grants for sewage treatment plants. It removes the old dollar limitations which discriminated against cities such as Portland. His committee has approved a major expansion in research and development funds to work on problems of tidal estuaries, improved methods of waste treatment. Up to 50 per cent in Federal matching funds may soon be available for cleanup projects in river basins, where the state agrees to put up 30 per cent of the project cost.

Thus, a community in Maine would be able to upgrade its water quality and pay only 20 per cent of the cost. A fine investment!

The Muskie bill warrants the full support of Congress. Its cost—an estimated six billion dollars over the next six years—is small compared with the benefits it will bring. And among those benefits will be the opportunity for Maine to execute plans which Maine communities should get in readiness now.

Local cost can be further reduced by imaginative design of combined sewage and waste disposal plants. Already cities have installed these which get rid of their garbage, waste and pollution problems and then show the city a profit, through the sale of byproducts from such a plant.

A plant like this is envisaged by Thomas F. Griffin Jr., Portland's Director of Public Works, and is reported in the news columns of today's paper.

In summary, we hope that the facts re-

vealed in the current series of Telegram articles will stimulate every Maine town and city bordering the coast or bordering a river to put pollution at the top of the list of Town Business. And keep it there until positive action is taken. For support, information and advice, write to your Senator MUSKIE of Maine, Washington, D.C.

Mr. BOGGS. Mr. President, I would like to add a few thoughts to the analysis and explanation of S. 2947 which has just been presented by the able junior Senator from Maine.

My work with him on the Subcommittee on Air and Water Pollution has given me a deep appreciation of his dedication to the cause of pollution abatement. The fact that this important bill is before us today reflects his understanding of the nationwide urgency of the water pollution problem.

In general this bill expands the Federal Government's effort to attack water pollution. It would help clean up rivers by providing for a basinwide approach. It offers more funds for hard-pressed large urban areas and a revolving loan fund to help communities with sewage projects. It adds to the water pollution research programs.

Details of the bill have already been well explained by the junior Senator from Maine. I will not take time to repeat them.

What I would like to emphasize in our overall consideration of the water pollution problem is that effective action involves far more than money.

It involves a greater public awareness of the stake which individual citizens have in water pollution abatement. And it involves cooperation by these citizens, private businesses, and all levels of government.

To put it simply, water pollution is everyone's problem. If greater attention is focused on steps to control it, if civic organizations and other groups can increase their efforts to explore ways to meet local problems, I believe that great progress can be made through voluntary action based on understanding of the situation.



An example of spectacular achievement in this area, to the benefit of all concerned, is found in the successful project to clean up the North Platte River in Wyoming. It involved coordinated efforts by Federal, State, and local governments, plus private industry and private citizens.

In 1948 the U.S. Public Health Service reported that the 150-mile section from Casper, Wyo., to the Wyoming-Nebraska line was "so grossly polluted with human and refinery wastes that it is doubtful if recovery can ever be obtained."

Today this same stretch of water swarms with perch, sunfish, pike, and trout. Boy Scouts canoe on it and swim in it. Tourists camp by its side and water ski behind the big dams. Some towns tap it in dry spells. In short, the river has come back to life.

I want to point out to my colleagues that here in the Senate is one of the men responsible for the return to health of the North Platte River. Early in 1955,

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Senator MILWARD SIMPSON, then Governor of Wyoming, hired a sanitary engineer and told him he would back him to the fullest in a program to clear up the river.

As a result of this Governor's determination, and the cooperative support behind his determination, the people of Wyoming are now enjoying their river. Bottomland has risen in value from \$240 an acre 10 years ago to \$1,500 an acre now. Some of the companies which spent a great deal of money on pollution control are discovering long-range benefits, financial and otherwise, which they had not expected.

My point in mentioning this project is that it demonstrates what can be done when there is leadership, public understanding, and broad cooperation by everyone concerned.

It is the same combination which will produce results elsewhere in the country. The money we provide is important, but it is not the whole answer by any means.

Since the Federal Government is active in encouraging pollution control, I think it is well to emphasize again that in assuming leadership the Federal Government also assumes the responsibility for making sure that its own house is in order.

I am reminded of this responsibility because of a situation in my own State of Delaware at Dover Air Force Base. Water pollution from the base has been a problem for many years. Funds have been provided to correct one source of pollution from the base, but a serious pollution problem remains. Understandably there is not enough money to get everything done at once, but this matter of pollution is of such vital importance that we must be sure the Federal Government lives up to its responsibility.

Mr. President, I commend again the efforts of the junior Senator from Maine and the other Senators who have contributed to improvements in S. 2947. It is a significant piece of legislation dealing with an urgent problem. I hope that it will be quickly approved.

I thank my colleague for yielding me the time.

Mr. MUSKIE. I thank the distinguished Senator from Delaware for his committee work and for his excellent statement. The Senator has been a strong right arm and has helped make this subcommittee and committee effort a cooperative one. This cooperative effort has produced some excellent legislation.

#### TRUTH IN WATER POLLUTION CONTROL

Mr. BARTLETT. Mr. President, I support in its entirety—I support strongly—the bill S. 2947 now before the Senate, which amends the Federal Water Pollution Control Act, strengthening, improving, and making it more effective.

The Senate has reason to be thankful for the dedicated and intelligent leadership which the junior Senator from Maine [Mr. MUSKIE] has provided. The Subcommittee on Air and Water Pollution has held full and comprehensive

hearings. It has received evidence from representatives of government, labor, and industry, and from public-spirited organizations. Twenty-seven Senators from both parties also presented statements to the subcommittee on the bill.

In his opening statement, the junior Senator from Maine outlined the provisions of the bill, the programs authorized, and the new authorities that would be granted to the Secretary of Health, Education, and Welfare to insure truly effective water pollution control policies.

I have a particular interest in the bill, Mr. President. I have interest particularly in section 212, on page 30, starting at line 8. This section would authorize the Secretary of HEW, whenever he would have reason to believe that a person's activities are resulting in "discharges causing or contributing to water pollution or whose activities may affect the quality of the waters involved," to require that person to file a report giving full information on the extent of the pollution, its cause, and the steps needed to reduce it.

This section would be important to the Secretary in his struggle to reduce the pollution of our Nation's rivers and streams. All too often in the past it has been difficult, if not impossible, for the Secretary to obtain all the information he requires from private sources, as well as public. This section would give him the authority of law with which to acquire this information.

This section would be helpful to Congress—for Congress has had as much difficulty as many administrative agencies have had in obtaining the full facts on the pollution of our environment. Congress has had difficulty in this regard not only from private industry but from Federal agencies as well. To show the importance of this matter, I call the attention of the Senate to one instance:

As I pointed out in a speech on June 23 of this year, several of the tributaries of the Colorado River during the late 1950's and the early 1960's received substantial unwarranted amounts of radioactive

contaminants from uranium mill tailings, the refuse of uranium mining processes. The uranium mills had been in operation since 1945. Reports of varying accuracy and detail of this contamination have been current for several years. And yet not until the report by the Federal Water Pollution Control Administration was released in March of 1966 did we have a comprehensive survey of the extent of the hazard, the efforts which have been made to bring about its abatement, and the further efforts which will be necessary.

Even with this report, it was not until this subcommittee began its hearings on the bill that we received the full appalling facts on the extent of the contamination in years past.

Only in these hearings did we learn that algae in the San Miguel River at one time contained levels of radiation 800 times the natural level. Only then did we find out that these rivers at one time contained fish 98 times more radioactive than they should have been. Only then did we learn of water so radioactive that persons drinking it would have received levels of radiation exceeding those considered acceptable by the Federal Radiation Council.

For 20 years, uranium mines and mills have been operating in the Colorado River basin.

We have no reason to doubt that uranium waste products have been contaminating the river all this time.

Geiger counters and the other radiation monitoring devices have been available all these 20 years.

Presumably, the privately owned mills have been equipped with these devices.

Presumably, the Atomic Energy Commission and its personnel have been likewise equipped.

Presumably, both have known of this contamination. They have known of the potential hazards they were causing. They have known of the hazard even as they were creating it.

And because of the complex and complicated terminology which must be used

in discussing these matters, it has been possible to hoodwink Congress and the American people.

Because the Secretary of HEW and the Federal Water Pollution Control Administration have lacked the authority to require the presentation of full information, it has been possible to deceive the people by giving them only half the facts and by presenting the facts in a manner calculated to confuse.

I do not level a blanket accusation of hoodwinkery and deception. I only say that there have been such cases of this in the past, and I am pleased to say that the chances of such cases happening in the future would be considerably reduced by passage of the proposed legislation and by section 212 of the bill in particular.

Mr. President, I congratulate the junior Senator from Maine and the other members of his subcommittee for an excellent and important piece of legislation.

Mr. MUSKIE. Mr. President, I wish to express my appreciation to the distinguished Senator from Alaska [Mr. BARTLETT], who is one of the sponsors of the pending legislation, for his excellent statement.

The Senator from Alaska has been a longstanding supporter of legislation in this field. It has been a pleasure and a privilege to work with him, not only with respect to water pollution, but other conservation issues in which we have a mutual interest.

I particularly appreciate that portion of the Senator's statement dealing with uranium mill tailings piles on the Colorado River. I think it is important that we focus attention on this problem, which need not be a serious one, but one which we contend has been rather carelessly neglected by the Atomic Energy Commission.

I appreciate the statement of the Senator from Alaska [Mr. BARTLETT].

Mr. BARTLETT. I am grateful for these words from the Senator from Maine. I believe he is making a great contribution to the welfare of this Na-

tion in bringing the bill to the floor of the Senate.

Mr. MUSKIE. I thank the Senator.

Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

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The legislative clerk proceeded to call the roll.

Mr. MUSKIE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MUSKIE. Mr. President, I send to the desk an amendment and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk proceeded to read the amendment.

Mr. MUSKIE. Mr. President, I ask unanimous consent to dispense with the reading of the amendment.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment to the committee amendment, offered by the Senator from Maine [Mr. MUSKIE] is as follows:

In page 27, line 10, after the word "finance" delete the word "its" and insert in lieu thereof the words "the local "

Mr. MUSKIE. Mr. President, this is a technical amendment which is designed to effectuate the intent of the committee. It pertains to section 209 of the bill which provides the loan program to assist those communities in depressed areas when the States do not contribute to the cost of municipal treatment works.

The language of the bill, as it appears before us, creates some confusion, or at least some ambiguity, as to whether such funds will be available to States to cover their portion of the cost of the project. It was the intent of the committee that the loan program be available only to cover the local share of the cost of the project. The proposed amendment would accomplish that result.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Maine [Mr. MUSKIE].

The amendment to the committee amendment was agreed to.

Mr. MUSKIE. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. MUSKIE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### AMENDMENT NO. 642

Mr. COOPER. Mr. President, I call up my amendment No. 642 and ask that it be stated.

The PRESIDING OFFICER. The amendment to the committee amendment will be stated for the information of the Senate.

The legislative clerk read as follows:

On page 23, line 24, insert "(a)" immediately after "Sec. 204."

On page 24, between lines 6 and 7, insert the following new subsection:

"(b) Subsection (a) of section 7 of the Federal Water Pollution Control Act is amended by striking out the period at the end thereof and inserting in lieu thereof a comma and the following: 'including the training of personnel of public agencies'."

Mr. COOPER. Mr. President, I have discussed this amendment with the distinguished Senator in charge of the bill, but thought I might make a brief explanation. It will be noted that my amendment would make funds available to States and interstate agencies for the training of personnel of public agencies in the prevention and control of water pollution and would include employees of municipalities. I believe it would be helpful to read section 7(a) of the present act:

Sec. 7. (a) There are hereby authorized to be appropriated for the fiscal year ending June 30, 1957, and for each succeeding fiscal year to and including the fiscal year ending

June 30, 1961, \$3,000,000, [and for each succeeding fiscal year to and including the fiscal year ending June 30, 1968, \$5,000,000] for each succeeding fiscal year to and including the fiscal year ending June 30, 1967, \$5,000,000, and for each succeeding fiscal year to and including the fiscal year ending June 30, 1972, \$10,000,000 for grants to States and to interstate agencies to assist them in meeting the costs of establishing and maintaining adequate measures for the prevention and control of water pollution.

Mr. President, if my amendment is adopted, it would add these words, "including the training of personnel of public agencies."

I would like to point out that section 5(a) of the act authorizes the Secretary to provide training in technical matters relating to the causes, prevention, and control of water pollution in the conduct and coordination of research, investigations, experiments, and studies in this field.

It is my belief that there is an additional need to train individuals employed in water pollution control and abatement programs at the State, county, and municipal level. Thus, where funds are now authorized for the training of personnel in technical matters the thrust of my amendment is to authorize funds to State, county, and municipal agencies and interstate agencies so that these agencies may train the additional personnel required to operate the water pollution and control facilities to be financed under this bill.

From my talks with officials and publicly interested citizens in my own State of Kentucky and individuals of other States who have undertaken programs to provide for controls and abatement of water pollution, I know that there exists a great need for trained personnel. Congress will not achieve its purpose by authorizing increasingly large sums to the States, municipalities, and other agencies in the form of grants for the construction of treatment works where there are not adequately trained personnel to operate these facilities.

One of the projects of the Junior Chamber of Commerce of the United

States has been to assist in this great task of water pollution control, and the junior chamber of commerce has found that there is a need for the training of personnel to man these facilities.

I am happy to note that in my own State the Kentucky Junior Chamber of Commerce has shown leadership in this field by embarking on a statewide program to bring to the attention of the public the need for new and more effective facilities to control and abate pollution and the necessity of securing skilled personnel to operate these facilities.

I would therefore appreciate it very much if the distinguished Senator in charge of the bill would comment on my amendment, and I hope would agree to its acceptance.

Mr. MUSKIE. Mr. President, I have discussed this amendment with the distinguished Senator from Kentucky and have given his amendment by unqualified support. A number of witnesses, in the course of the hearings, testified to the need for the increased availability of engineering, scientific, and technical manpower to operate pollution control facilities. The general indication was that existing programs are suffering from a shortage of manpower and that an expanded program would be needed. This expanded program will require a greatly increased Federal commitment to training.

It might be useful to have printed in the RECORD some information received from the Federal Water Pollution Control Administration which indicates a wholly insufficient training grant program especially when related to personnel demands as indicated in the testimony.

I ask unanimous consent to have this information from the Water Pollution Control Administration indicating the amount of money now devoted to training grant programs printed in the RECORD.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

Appropriations for the training grant program for FY 1965, 1966 and 1967 are as follows: 1965, \$2,617,000; 1966, \$3,210,000; 1967, \$3,543,000 (est.).

There are three different training grant programs. The largest is the grants to institutions, \$2 million in 1965. There are 57 grants for 42 institutions in 32 states ranging from \$20 thousand to \$50 thousand, and aiding approximately 291 students.

The second training grant program is for fellowships to individuals, scientific and engineering students. Total allocation of this program in 1965 was \$700 thousand to 51 institutions in 28 states resulting in 101 graduate level fellowships.

The only other training grant program is for the Water and Sewage Operators Training School in Neosho, Missouri. The FWPCA provides partial support to the school which in 1965 amounted to \$40 thousand. This is the only full time plant operator training school in the United States.

The course covers a period of 32 weeks and in 1965 enrolled approximately 250 potential new plant operators.

Finally, the FWPCA provides courses in water pollution control at the Robert A. Taft Sanitary Engineering School.

Mr. MUSKIE. Mr. President, I wholly endorse the amendment of the Senator from Kentucky. Indeed, it may be necessary to do more in the years ahead in this field in order to give these facilities which would be built under the pending legislation effective maintenance and operation.

Mr. COOPER. I think so. I think it will be necessary to make more funds available in the future, but at least this is a start. I thank the Senator from

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Maine for his endorsement of the amendment.

The PRESIDING OFFICER. The question is on agreeing to the amendment to the committee amendment of the Senator from Kentucky.

The amendment to the committee amendment was agreed to.

#### PROTECT OUR RESOURCES, COMBAT POLLUTION

Mr. YARBOROUGH. Mr. President, as a cosponsor of S. 2947, I urge passage of this bill to improve the Federal Water Pollution Control Act. The bill would provide for more needed research,

extended and improved planning, increased construction, and more effective enforcement in water pollution control.

The inspired efforts of the distinguished junior Senator from Maine [Mr. MUSKIE], have been outstanding and his leadership on this legislation is a step forward in the vital area of water pollution control.

Water pollution is one of the gravest threats to our national welfare. The problem of water pollution is now and will be in the future an important aspect in this Nation's health, welfare, and economic growth. We must take the necessary steps today to insure our country's rising needs for this precious product of nature. There is much water today but we must realize that the supply is not infinite and in order to serve all of our purposes, water pollution control must be properly managed.

The problem of water pollution is awesome. Expenditures for the treatment of industrial wastes are tremendous. To give some idea of the size of this problem, the industrial organic waste in 1970 is estimated to be equivalent to the raw sewage of a population of 210 million.

Another major problem in water pollution control is that of sewer runoff systems, not only for sanitation purposes but also for storm runoff control. This problem confronts 1,900 communities affecting nearly 40 million people with an estimated cost of \$8 billion.

These figures on pollution of our fresh water supplies are appalling. Such insidious elements as chemical wastes, radioactive wastes, even recreational facilities such as motorboats with their fumes and oils contribute to the destruction of our fresh water areas.

Mr. President, I read an article recently that penguins captured in the Antarctic, which are nonmigratory and never leave their area, were found to have DDT in them. This DDT is washed down from the fresh water rivers and also through the ocean currents and contaminates the fish which are caught there.

Mr. President, this is a nationwide problem. I daresay that not a State or a community is free from the menace of water pollution. In my own State of Texas we are faced with many difficult cases.

The water in the Houston Ship Channel poses a danger to health and creates a fire hazard at the same time. A Texas newspaper notes:

To fall into this oily mess is to court death, while its fumes endanger the health of those who live and work along its banks. Fire prevention authorities worry daily that carelessness may ignite some of the volatile chemicals, setting off a chain of fires and explosions that could cause astronomical losses.

I ask unanimous consent that the editorial from the July 3, 1966, Dallas Morning News, entitled "Fabulous, But Filthy," be printed at this point in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

Houston Ship Channel carries two true descriptions. One is that of a "fabulous 50 miles." The other is "probably one of the worst problems in water pollution anywhere in the country." Still another, unfortunately, might be added. A fire hazard that could cause a worse explosion than that at Texas City.

This mixture illustrates the dangers man can create as he builds. The great industries along Houston's waterway represent an investment of more than 25 billion dollars. Ships from all over the globe come and depart loaded with raw materials and finished products.

Largely because of water traffic, Houston has become one of the great cities of the world, as well as Texas' largest.

But the Texas Water Pollution Board, joined by the Harris County attorney's office, is battling to stop the nauseous contamination that tarnishes the economically golden hue of this channel.

Houstonians say that to fall into this oily mess is to court death, while its fumes endanger the health of those who live and work along its banks.

Fire prevention authorities worry daily that carelessness may ignite some of the volatile chemicals, setting off a chain of fires and explosions that could cause astronomical losses.

It is encouraging to see more action being taken on the problem there. Farther and

faster steps are needed. Some system of inter-governmental cooperation will be necessary, probably, because too many units of government are working independently, if at all, to curtail these hazards.

Neither those along the Houston Ship Channel nor Texans as a whole can afford not to eliminate the dangers. Furthermore, North Texas and other areas where the problem is not yet so critical must learn from South Texans' experience. An ounce of prevention is worth a pound of cure, in pollution and fire hazards as in other things.

Mr. YARBOROUGH. Mr. President, in Texas also, there are almost 30,000 people living in communities that are discharging untreated sewage. To correct this grave situation would incur an approximate cost of over \$1 million.

Over 174 communities affecting more than 2 million people in Texas have inadequately treated sewage. And many other communities in Texas have no sewers at all and are potential health hazards.

Another major problem of pollution in my home State is pollution from oil wells. Through the work of such groups as the railroad commission, pollution control is being advanced. But much more is needed to be done, and this present legislation will assist in these water pollution control efforts.

Water pollution is expensive, not only for the individual and the businessman but for the community and the Nation. There is no escape from such an economic loss of our most valuable natural resource. The price of pollution is spread throughout the society by reduced availability of water and restricted growth of the economy.

Pollution control measures ease adverse conditions and produce innumerable benefits through improved waters. One cannot immediately measure these benefits in dollar-and-cents figures, for the gain from recreation, health, scenic improvements, and the future utility of water resources cannot possibly be tallied.

Water pollution is a national problem; therefore, action should be taken on all levels—local, State, and national.

Water is a precious national resource. Ever-increasing industrialization and population growth will make great demands for it in the future, pushing our supply to its limit. We must not remain blind to the problem until it is too late to do anything about it.

We must take action now to provide a plentiful supply of usable water for future generations.

This legislation will aid in the furtherance of water pollution control by improving and increasing the effectiveness of the programs of the Federal Water Pollution Control Act. It would raise the authorization for extended grant and contract authority for research purposes, and would also further support incentive pollution control programs.

S. 2947 proposes an expansion of construction grants, with a 5-year extension through 1972 along with increased appropriations. This bill calls for a 1,000 percent increase in the construction program set out by the Water Quality Act of 1965 in the next 5 years, from \$150 million for fiscal 1967 to \$1,500 million in 1972.

I hope that this valuable legislation will be favorably acted upon by my colleagues, for this bill contains the tools for benefits essential to the whole Nation.

More than anyone else, tribute should be paid to the Senator from Maine, who has worked so long to bring about this legislation.

Mr. MUSKIE. I thank the Senator for his continued support in this field and for his kind comments about me. We could not have gone as far as we have without the support of the Senator from Texas, who, although he is not a member of the committee, has given us the benefit of his help.

MR. KENNEDY of Massachusetts. Mr. President, it gives me great pleasure to speak today in support of S. 2947, which I was pleased to cosponsor. This bill represents the work of many able hands. It unmistakably bears the imprint of the eminent junior Senator from Maine, Senator MUSKIE, who, as chairman of the

Water Pollution Subcommittee, has ably led the Senate in the fight to clean our waters. It incorporates President Johnson's imaginative proposal for a clean river restoration program. And it reflects, as well, the efforts of the almost 30 Members of the Senate from both parties who have spoken out in this session in support of a broadened Federal commitment to water pollution control and abatement.

Finally, Mr. President, I consider it fitting to observe that this legislation marks the culmination of the leadership

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efforts over a period of many years of the former chairman of the Senate Public Works Committee, the late Senator Pat McNamara, of Michigan, who created the Air and Water Pollution Subcommittee over 3 years ago. It was Senator McNamara who recognized that this Nation can no longer afford the widespread illusion that our water supplies are drawn from a limitless source. And it was Senator McNamara who resolutely defined as our responsibilities to "take whatever steps are necessary to develop, conserve, and protect our water resources in order to meet the Nation's soaring needs for this precious product."

The legislation we are considering today marks a significant advance toward the fulfillment of those responsibilities. It is the most comprehensive piece of water control legislation ever to come before the Senate. It not only extends and broadens existing law and authorizes a commitment of Federal resources on a level of unparalleled but necessary magnitude, it also focuses on other aspects of pollution, such as those caused by the discharge of oil and the neglect of our estuaries, and it attempts to come to grips with the need for greater efforts in the area of research and experimentation, for greater knowledge about the impact and costs of pollution, and for more skilled personnel to carry out our expanded programs of water pollution control and abatement.

I would like to comment in detail about several aspects of this legislation.

As a Senator from a State where the problems of water pollution are immense and urgent, I am heartened by the realistic, no-nonsense approach which the committee has taken in authorizing funds to meet the existing backlog for the construction of waste treatment facilities.

Since 1957, Federal assistance of almost \$700 million has been given to some 62,000 pollution control projects, but this level of assistance provides only a fraction of the resources which will be required to undo the damage which our past neglect has caused.

Consider the magnitude of need just in my own State of Massachusetts.

Twenty-eight Massachusetts towns are involved in the pollution of the Merrimack. It is estimated that it will cost \$80 million for these towns to construct the treatment plants necessary to clean this river.

Twenty-six Massachusetts towns are involved in the pollution of the Connecticut River. It is estimated that it will cost \$20 million for these towns to build the necessary projects.

Thirteen Massachusetts towns are involved in the pollution of the Blackstone River. It is estimated unofficially that it will cost \$35 million for these towns to construct pollution abatement facilities.

And the estimated total cost of cleaning all of Massachusetts waters is placed at a minimum of \$300 million. This enormous investment is required not to achieve some theoretical standard of water purity but merely to establish minimum standards for waters which are presently suitable only for the transportation of sewage and industrial waste.

The problem of water pollution in Massachusetts is perhaps more serious than in some States, but the national needs are of the same order of magnitude. One estimate places the costs of secondary waste treatment facilities for the Nation by 1975 at 20 billions of dollars and the committee observes that the



total cost of pollution control could well exceed \$100 billion.

It is clear that the local communities faced with these requirements lack the resources to construct the facilities solely by themselves. We must therefore greatly increase the scale of our Federal support and we must provide maximum incentives to the States and local communities to join together in a concerted effort to abate pollution.

That is why I am so delighted with the provisions of this bill which would authorize a total of \$6 billion in appropriations through fiscal year 1972, eliminate the existing dollar-ceiling limitations on individual projects grants, and provide a 30-percent grant for every project regardless of cost. On the basis of the allocation formulas established under this legislation, Massachusetts could be eligible over the next 6 years for some \$160 million in Federal assistance. When you compare this figure with the some \$3 million in Federal assistance that Massachusetts received this past year, one can appreciate the difference that this greatly expanded program of Federal assistance can make to the waging and winning of our war on pollution.

At the same time, Mr. President, this bill recognizes that simply making more Federal money available and removing dollar ceilings will not be enough. When I testified before the Water Pollution Subcommittee on my bill, S. 2857, I pointed out that S. 2947 and my bill arrived at many of the same conclusions. I stressed, however, the need for mechanisms to insure maximum participation by the States in support of municipal pollution abatement projects. I also pointed out the necessity for making an effort to allocate Federal funds more on the basis of need rather than solely on the basis of traditional formula.

I am pleased that the committee bill incorporates the President's clean rivers restoration program in a form designed to encourage greater participation by the States under the bill, once a river basin

planning agency is designated, water quality standards are established, and the State meets 30 percent of the project costs, the Federal Government may provide up to 50 percent of the project cost. The additional 20 percent Federal assistance is exactly the kind of incentive that I have urged we offer the States to encourage them to develop State assistance programs.

Considering the difficulties that communities such as Lowell and Haverhill on the Merrimack River in my own State of Massachusetts have in financing construction of treatment plants, this provision of the bill, which could cut the local burden to 20 percent of the project cost, could make a tremendous difference to communities which are anxious to combat pollution but lack the resources to translate intentions into action.

*I remain convinced that we must continue to work toward allocating our Federal assistance more on the basis of need and I would like to ask the eminent Senator from Maine about the future in this regard.* Under this legislation will the States who have the greatest needs and who are willing to do their share in matching Federal grants for pollution control receive adequate grants to meet these needs?

Mr. MUSKIE. I say to the distinguished Senator from Massachusetts that, under the bill as it is now written, the Federal share would be increased to 30 percent of the total project cost, whether or not the States make a contribution to that cost. If the States make no effort—and 42 States do not now make an effort—local communities would have to bear 70 percent of the cost.

Under the clean rivers restoration title of the bill, if the States meet certain conditions and contribute 30 percent of the project cost, then the Federal share would go to 50 percent, leaving the local share at 20 percent. We think that would be a realistic sharing of the burden.

I do not know why the States have not responded to this challenge. The basic act under which our programs are now

operating is based on the assumption that the primary responsibility rests with the States. The States have asserted their primary responsibility. And yet only eight of them, up to this point, make any financial contribution to the cost of sewage treatment projects.

In order to encourage necessary State participation in the grant program we have tried to provide additional incentives in this bill.

Mr. KENNEDY of Massachusetts. Is the Senator from Maine satisfied that, if the States are willing to meet their responsibilities and the local communities theirs, the funds authorized in this bill are sufficient to meet the demands which would be placed upon them in those areas in which there is the greatest need?

Mr. MUSKIE. It is our estimate that the funds provided through 1972 will be adequate to provide primary and secondary treatment for 80 percent of the population of the country.

Mr. KENNEDY of Massachusetts. And the Senator is satisfied that if the States and the local communities are responsive in working out programs to meet their critical needs, sufficient funds will be made available so that those communities and those States which have significant pollution control problems and are really in desperate need can meet their obligations?

Mr. MUSKIE. Yes. Now, there are two areas of the problem that are not touched by this bill. One is the separation of storm and sanitary sewers for which Congress authorized a demonstration grant program last year. The second is the problem of industrial waste, for which Congress has not yet provided. Sufficient assistance for industry is not yet available.

With those two exceptions, my answer to the Senator is in the affirmative.

Mr. NELSON. Mr. President, will the Senator from Massachusetts, while the

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Senator from Maine is here, permit me

to ask him a question?

Mr. KENNEDY of Massachusetts. I have a brief amendment and a brief comment on it; then I shall be delighted to yield the floor. So with the Senator's indulgence, if we can proceed in that way I would appreciate it.

Mr. NELSON. Yes.

Mr. KENNEDY of Massachusetts. Mr. President, there are several provisions of this legislation which cover new ground and are vital to a comprehensive program of pollution abatement and control. The first of these amends the Oil Pollution Act of 1924 to make it unlawful to discharge oil from vessels, shore installations, or terminal facilities into inland or coastal waters.

My own State of Massachusetts has been constantly plagued by the problem of oil pollution. For example, in the spring of 1965 oil spilled off the Massachusetts coast in the area of Fall River covered the shoreline and the entire shellfish area. Only in recent months has the shellfish area started to clear.

During the same spring, oil spillage occurred in the Charles River, a river bordered by historic and cultural landmarks. The picturesque shoreline was coated with a layer of black sludge, all the way from Watertown to the ocean. Indeed there are waterways in our State such as the waters of the Mystic River and the wharf areas of Boston Harbor, that are continually polluted with oil. These are examples of what has become a national problem. I am hopeful that the stiff penalties for discharging oil provided for in the bill will do much to ameliorate this abuse of our Nation's waters.

I am also happy to see that S. 2947 provides that the Secretary of the Interior make a study of the costs of carrying out the provisions of this act, and a comprehensive survey of the costs and problems of national water pollution control. At the present moment, we cannot foresee the specific results of the passage of S. 2947. We know that the bill is a great step forward in pollution

control and abatement. But to keep up with the advances that will be made as a result of this legislation, to expand our knowledge and our skill in coping with pollution, it is essential that a study be made of our progress in water pollution control.

Finally, I note the provision for a comprehensive study of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States.

The estuarine zones of our Nation are essential for the purposes of commercial and sport fishing, for recreation, and for camping and hunting. Yet until now, they have been virtually neglected. It was with this in mind that I recently proposed a bill to provide for a nationwide study by the Secretary of the Interior to identify the estuarine areas which should be protected from further deterioration caused by population pressures and water pollution.

Consequently, I consider this provision of S. 2947 a very important contribution to this legislation.

Before I conclude my remarks, Mr. President, I shall offer an amendment to S. 2947.

On April 11, 1966, I received a letter from Dr. N. Bruce Hanes, director of environmental engineers, Tufts University. Dr. Hanes drew my attention to the severe shortage of trained personnel trained in the essential skills of water treatment and sewage control. He emphasized that fellowships are made to students on the graduate level, but not in sufficient number on the undergraduate level, where such fellowships or scholarships would offer incentives to students to begin studying techniques of water pollution and sewage control in the first years of college rather than later in graduate school.

He pointed out that unless action were taken, full implementation of our growing water pollution programs might be thwarted by a lack of skilled manpower.

I then wrote to the Secretaries of the Interior, Labor, Health, Education, and

Welfare, and Housing and Urban Development inquiring into this problem and suggesting that consideration be given to convening a national manpower conference to explore the question. Their replies indicated that the problem of shortages of skilled personnel was manifest, but yet to be confronted.

I ask unanimous consent that copies of that correspondence be printed in the RECORD at this point.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

TUFTS UNIVERSITY,  
COLLEGE OF ENGINEERING,  
Medford, Mass., April 11, 1966.

Att. Miss Barbard Souliotis.  
The Honorable EDWARD M. KENNEDY,  
Senator of Massachusetts,  
U S Senate, Washington, D.C.

DEAR SENATOR KENNEDY I am writing this letter to express my grave concern of the success of the extensive Federal programs in the field of water pollution which were enlarged and initiated by Legislation in 1965, and the new programs that are being considered this year.

I feel that many funds have been channeled into this critical problem area without consideration of where the trained personnel will come from to carry these programs to a successful completion. I anticipate that the country will soon find itself in the position of New York State where 1.7 billion dollars have been made available through a bond issue and Federal funds to clean up the pollutional problems in the next seven years; however, they now find that they do not have the trained personnel to do the job nor can they find them. I am expressing this opinion as a young engineer who has been concerned with education in the field of water pollution for nine years and as the Director of Tufts University Environmental Engineering Program.

For example, last year the 89th Congress passed several laws which will make available millions of additional dollars to attack the broad problem of water pollution on several fronts. The major bill was the Water Quality Act of 1965 (P.L. 89-238) which provided an additional \$50,000,000 a year of matching funds for the construction of sewage treatment plants. It also provided \$20,000,000 per year of matching funds for the purpose of assisting in the development of new or improved methods of controlling storm sewage. In addition to the Water Quality Act of 1965, the following bills were enacted which contain provisions regarding water supply and

## pollution control:

P.L. 89-117: \$200,000,000 per year of matching funds for the financing of basic public water facilities;

P.L. 89-136: \$500,000,000 per year of matching funds for the construction, expansion or improvement of public works facilities in redevelopment areas;

P.L. 89-4: \$6,000,000 per year of funds for the construction of sewage treatment works in communities in the Appalachian region;

P.L. 89-240: \$50,000,000 per year of matching funds to finance, among other things, the treatment or disposal of waste in rural areas.

In addition, The Water Resources Planning Act of 1965 is designed to "meet the rapidly expanding demands for water throughout the nation \* \* \*". This Act establishes a water resources council and river basin commissions and makes provision for financial assistance to the states to increase their participation in water resources planning. The Federal Water Project Recreation Act of 1965 provides for the consideration, in the planning of federal water projects, of the possibilities for outdoor recreation and fish and wildlife enhancement. Provisions relating to water are also contained in the River and Harbor Act of 1965 and in Public Law 89-42 which authorizes \$944 million for flood control and navigation improvement projects in thirteen river basins over the next two years.

According to the publication "Federal Water Resources Research Program for fiscal year 1966" the Federal Government budgeted a total of \$1.8 billion dollars for water resources development for fiscal year 1966. Of these funds, only \$9.7 million dollars were directly earmarked for manpower education. The Department of Interior administers \$6.4 million dollars of these funds under P.L. 88-379 which authorizes the establishment of specific research studies at designated universities. It is questionable whether these funds should be strictly considered educational funds rather than research funds since they support faculty, research personnel, and graduate students who participate in research while pursuing course work at the same time. The balance of the educational funds (\$3.2 million) are administered by the Federal Water Pollution Control Administration (FWPCA) and provide direct support for graduate students. These funds provide training grants to universities and individual fellowships on the basis of merit which permits students to pursue full time academic programs. The educational effort by the FWPCA was increased from \$26 million in fiscal year 1965 to \$3.2 million in fiscal year 1966. Even with this increase the educational output of trained men has lost ground this year in comparison to the number of jobs that are now available. As a result, of the greatly increased Federal funds that have been made

available as outlined to combat pollution, hardly a day passes that requests for trained students in this area are received at Tufts from the Federal, State, and local level. We now find it possible to fill only a small fraction of these requests. This failure is a result of inadequate funds for graduate training combined with the necessity of many of our graduates to serve the country in the armed forces.

Next year this critical situation will become worse. President Johnson sent to Congress on February 23 a comprehensive message on pollution entitled "Preserving Our Heritage". In this message, he made eight badly needed specific proposals as follows:

1. A Clean River Demonstration Program which would "clean and preserve entire river basins from their source to their mouths." The four requirements included (a) adoption of appropriate water quality standards for entire basins, (b) development of long-range comprehensive and practical plans to achieve and preserve those standards by the states and local communities, (c) where not already

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existing, the creation of permanent river basin organizations, and (d) willingness and ability of communities to obtain and contribute funds for construction of facilities.

2. Increase the federal contribution to the program for construction, planning, and administration. This includes the request to appropriate for clean river demonstration projects \$50 million for fiscal 1967.

3. Reorganize and concentrate the water programs in the Department of the Interior. This includes the transfer of the newly created Water Pollution Control Administration from the Department of Health, Education, and Welfare to Interior. In the way this was done, the transfer automatically will be effected in 60 days unless Congress vetoes the proposal.

4. Increased financial support for state agencies. The specific request was to double the federal contribution.

5. Strengthen the federal enforcement powers. This includes proposals (a) to eliminate the two mandatory six-month delays now in the procedure, (b) to allow the federal government to bring suit to stop pollution when that pollution constitutes imminent danger to public health or welfare, (c) to give more weight in the courts to evidence produced in administrative enforcement hearings, (d) to allow the federal government the right to subpoena witnesses to appear at administrative hearings, (e) to allow the federal government the right to initiate enforcement proceedings when pollution occurs in navigable waters, intrastate or interstate, (f) to require registration of all existing or potential sources of major pollution and U.S.

representatives be allowed to inspect such sources, and (g) to allow private citizens to bring suit in federal court to seek relief from pollution.

6. Strengthened research for new and improved concepts of water pollution control. The message states, "But if pollution control is to cope with increasing volumes of waste from our growing industry and population, new knowledge and technology are required. It is a challenge to research organizations, both private and public, to develop these technologies."

7. Expansion of training to meet the shortage of personnel. This includes the proposal to establish traineeships, fellowships, and an internship program in federal water pollution control activities.

8. Establishment of a National Water Commission to review and advise on the entire range of water resource problems—from methods to conserve and augment existing water supplies to the application of modern technology, such as desalting, to provide more usable water for cities, industries, and farms.

It is apparent from these proposals that a large number of funds are immediately needed in the field of education if the manpower needs are to be met from last year's legislation as well as the new bills that are being considered this year as outlined in the President's message.

A comparison of education funds available for full time study in fiscal year 1966 and proposed funds for full time study in fiscal year 1967 under the FWPCA Program is made below:

Fiscal year 1966:

Training grants .....	\$2,500,000
Fellowships .....	700,000
Total .....	3,200,000

Proposed fiscal year 1967:

Training grants .....	2,910,000
Fellowships .....	633,000
Total .....	3,543,000

The total proposed increase in this program for next year (considerably less than last year) is \$343,000 and will not provide the flood of additional trained engineers and scientists to meet our needs. The most important proposals in President Johnson's February 23rd message for the success of the overall water pollution program was item seven, calling for expansion of training in this area. The most effective way of accomplishing this is through a program that provides direct support for full time study similar to the current program at the FWPCA. This year's proposed budgetary increase of \$343,000 is not adequate.

The following suggestions are made to attack the present manpower shortage:

1. Expand the present FWPCA Education Program.

This program is established and is currently doing an excellent job. Increased expenditures in this program will bring more rapid results than establishing new programs.

2. Establish support for undergraduate students in the field of Environmental Engineering and Environmental Sciences.

It is realized that this is an extreme step to take in education, however, it would attract good students rapidly to the field at the undergraduate level. If we wait until students realize the shortage of manpower in this area which coupled with good wages are often the moving forces for selecting a field of study we will be short of qualified B.S. students for jobs and graduate study. The direct federal support of undergraduate students is on the way. Why shouldn't the field of Water Pollution lead and be first.

3. Declare water pollution a critical area of national importance and make people working in this field exempt from the draft.

This is a radical recommendation, however, the situation is desperate and extreme measures need to be taken now. It is conservatively estimated that 50% of graduates at both the graduate and undergraduate level have been lost to the draft this year. This measure would provide the most immediate results for new manpower and encourage students participation on all levels.

Action needs to be taken now, if men and women are to be available to design, build, and operate treatment plants; clean our rivers, lakes, and streams; make new water standards; and to enforce the new legislation.

I would be willing to offer testimony on this matter if it would be of any assistance.

Similar letters have been sent to the following: Hon. BRADFORD MORSE, Representative of Massachusetts; Secretary Stewart Udall, Department of the Interior; Subcommittee on Health, Education, and Welfare, House Appropriations Committee; Subcommittee on Department of the Interior, House Appropriations Committee.

Sincerely yours,

N. BRUCE HANES, Ph.D.  
Director, Environmental Engineering,  
Tufts University.

APRIL 25, 1966.

The Honorable WILLARD WIRTZ,  
Secretary of Labor, Department of Labor,  
Washington, D.C.

DEAR MR. SECRETARY: I am enclosing a copy of an excellent letter I have received from Dr. N. Bruce Hanes, Director of Environmental Engineering, Tufts University. Dr. Hanes points out that we may not be able to achieve full implementation of our new and growing water pollution programs because of a lack of

available manpower equipped with the necessary skills needed in this area. Since I share his concern, I would very much appreciate if you could determine what resources are available under existing legislation to train men for careers relating to pollution control.

Could you also advise me if the Bureau of Labor Statistics has formulated some projection of the manpower needs in this area over the next decade?

I would also like your judgment as to whether it would be desirable to convene a national conference to determine the need for skilled workers created by recent legislation designed to improve our natural environment, and whether our federal programs are adequately oriented to meet the need.

I look forward to hearing from you on this matter in the near future.

Sincerely,

EDWARD M. KENNEDY.

U. S. DEPARTMENT OF LABOR,  
Washington, May 6, 1966

Hon. EDWARD M. KENNEDY,  
U. S. Senate, Washington, D.C.

DEAR SENATOR KENNEDY: Thank you for bringing to my attention the very interesting letter from your constituent, Dr. N. Bruce Hanes, Director of Environmental Engineering, Tufts University. I, too, share your concern and that of Dr. Hanes that we will find our developing water pollution programs weakened by a severe shortage of personnel trained in the essential skills required.

Under the terms of the Manpower Development and Training Act, this Department has referred approximately 450 individuals from all over the country to the Water and Sewerage Technical School in Neosho, Missouri. Most of these men have been trained as water and sewage plant operators, which is a skilled occupation requiring from 36 to 52 weeks of instruction. The placement rate of course graduates has been quite good.

While this has been a successful program as far as it goes, we are not able, within the scope of this legislation, to provide training in the technical and professional occupations to which Dr. Hanes refers. He indicates in his letter that training for these highly skilled occupations should be conducted at the undergraduate and graduate levels, while our program emphasis is upon serving those with extremely limited educational, economic, and social backgrounds so as to make them employable.

Because of this, I believe that the programs conducted by the Department of Health, Education, and Welfare in the field of higher education are more promising for meeting professional needs of this type. I would suggest also that the question of a national conference dealing with manpower requirements for natural resource programs is de-

pendent primarily on the results of findings to be made by the Department of Interior in its administration of the Federal Water Pollution Control Act. Our Bureau of Labor Statistics has been informed that the Department of Interior is currently involved in a study of manpower needs in this occupational field which could conceivably serve as a basis for a conference such as you mention. We, of course, would be most willing to contribute to any effective solution to this problem.

Thank you again for bringing this matter to my attention.

Sincerely,

W. WILLARD WIRTZ,  
Secretary of Labor.

U. S. DEPARTMENT OF THE INTERIOR,  
OFFICE OF THE SECRETARY,  
Washington, D.C., April 29, 1966.

Hon. EDWARD M. KENNEDY,  
U. S. Senate, Washington, D.C.

DEAR SENATOR KENNEDY: I am acknowledging your letter of April 25 with which you enclose a copy of your letter to Secretary of Labor Willard Wirtz as well as a copy of a letter directed to you by Dr. N. Bruce Hanes regarding manpower requirements to solve the problems of water pollution.

This matter is, of course, a very serious one and we appreciate your bringing it to our attention. As Secretary of the Interior and as Chairman of the Water Resources Council,

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I shall want to have our experts study the matter carefully.

Sincerely yours,

STEWART UDALL,  
Secretary of the Interior.

THE UNDER SECRETARY  
OF HEALTH, EDUCATION, AND WELFARE,  
Washington, D.C., May 9, 1966.

Hon. EDWARD M. KENNEDY,  
U. S. Senate,  
Washington, D.C.

DEAR SENATOR KENNEDY: This is to acknowledge receipt of your letter addressed to Secretary Gardner dated April 26, 1966, enclosing a copy of a letter to the Secretary of Labor and a copy of a letter from Dr. N. Bruce Hanes concerning manpower needs and programs to deal with problems of water pollution.

Dr. Hanes' analysis of the manpower needs and programs to deal with water pollution control problems is a thoughtful and accurate appraisal of the situation. The need for engineers, scientists, and others trained in water pollution control and water resources management generally is a very significant one which is not being met by existing efforts.

As you know, the recently established Federal Water Pollution Control Administration

is rapidly expanding. It is experiencing the kind of needs that concern Dr. Hanes. As the Federal agency involved with supporting water pollution control training programs, and providing research grants and fellowships to individuals and institutions, it has considerable interest in the points raised by Dr. Hanes.

In your letter to the Secretary of Labor, you raised the question of convening a national conference. The Federal Water Pollution Control Administration has recognized the need for much more information in the manpower training field. Information needed would include numbers of persons required by profession or specialty, level of training required by position, phasing of needs relative to the pollution problem, the geographic area where needs are greatest, and ways in which the field could be made more attractive as an occupation. It is essential, too, that administrative delays are not encountered by qualified personnel after they have indicated their availability for a position in water pollution control.

We believe much more attention needs to be given the water pollution manpower problem than has been given in the past. Your interest in this situation is greatly appreciated. If we may be of any assistance, or can provide additional information, please let us know.

Sincerely yours,

WILBUR J COHEN,  
Under Secretary.

DEPARTMENT OF HOUSING AND  
URBAN DEVELOPMENT,  
Washington, D.C., May 11, 1966.

HON. EDWARD M. KENNEDY,  
U.S. Senate,  
Washington, D C

DEAR SENATOR KENNEDY: Secretary Robert C. Weaver has asked me to reply to your recent query concerning the manpower needs and programs to deal with the problems of water pollution.

We are taking the liberty of referring this letter to Mr James M Quigley, Commissioner, Federal Water Pollution Control Administration, of the Department of Health, Education and Welfare. I am sure Mr Quigley will reply to you in detail.

Sincerely yours,

PAUL K. WALKER,  
Acting Commissioner.

Mr. KENNEDY of Massachusetts. The Department of the Interior has more recently informed me that although they are gradually compiling information on the shortage of trained personnel they have not made a special study of this shortage.

The committee in its report on this legislation recognizes the importance of the problem. It urges:

(1) That the Federal Water Pollution Control Administration report to the Congress on the question of skilled manpower for operation of pollution control programs;

(2) That such national conference as recommended by the Senator be called at the earliest date consistent with orderly procedure;

(3) That the Department of Labor and the Department of Health, Education, and Welfare reexamine existing manpower development programs and other education programs to determine the extent to which those programs may be used for the training of needed skilled personnel.

It is impossible of course, to know exactly what the effects would be of an increased supply of trained personnel in water pollution control. But the prospects for greater efficiency and reduced cost are very encouraging. Water pollution experts from my own State of Massachusetts have estimated that with more skilled personnel they would be able to increase efficiency by 10 percent in 10 plants on the Merrimack River through the employment of more skilled personnel; they would save enough money to construct a multimillion-dollar treatment plant. The sad fact is that although Massachusetts officials realize the potential for increased savings, they find it very difficult to locate sufficient trained personnel to operate their plants.

It seems to me, Mr. President, that without a clear knowledge of how many men are needed to operate our water pollution control and abatement programs and without a positive training program oriented to meet those needs, we may find ourselves unable to achieve our pollution control objectives.

Consequently, to insure that this problem receives the consideration it deserves, I send to the desk a printed amendment, No. 640, and ask that it be read at this time.

The PRESIDING OFFICER. The amendment will be stated.

The LEGISLATIVE CLERK. The Senator from Massachusetts proposes amend-

ment No. 640, as follows:

AMENDMENT No. 640

On page 32, line 5, after "Sec. 17." insert "(a)".

On page 32, between lines 22 and 23, insert the following:

"(b) The Secretary shall also make a complete investigation and study to determine (1) the need for additional trained State and local personnel to carry out programs assisted pursuant to this Act and other programs for the same purpose as this Act, and (2) means of using existing Federal training programs to train such personnel. He shall report the results of such investigation and study to the President and the Congress not later than July 1, 1967."

Mr. KENNEDY of Massachusetts. Mr. President, the purpose of the amendment is to provide for a comprehensive study of the need for skilled personnel trained in the techniques of water pollution control and abatement, and to determine how best we can utilize existing Federal training programs to train such personnel.

The Secretary of the Interior would report the results of such investigation and study to the President and the Congress no later than July 1, 1967.

Mr. President, passage of this legislation will give us many of the tools and much of the financial assistance that will be needed in the years ahead to restore and preserve the quality of our water resources. The distinguished junior Senator from Maine and his colleagues on the committee are to be commended for bringing this legislation before the Senate.

I urge its speedy passage.

Mr. MUSKIE. I thank the distinguished Senator from Massachusetts, and am happy to support his amendment. This subject was discussed earlier, Mr. President, in response to the amendment offered by the Senator from Kentucky.

The committee was impressed by the presentation, during its hearings, made by the distinguished Senator from Massachusetts, and devoted, indeed, several paragraphs in the report to the subject which he has raised. I ask unanimous consent that that portion of the commit-

tee report be printed at this point in the RECORD.

There being no objection, the excerpt from the report (No. 1337) was ordered to be printed in the RECORD, as follows:

Senator EDWARD KENNEDY of Massachusetts provided the committee with an extensive analysis of the personnel problem prepared by Dr. N. Bruce Hanes, Director of Environmental Engineering at Tufts University. Dr. Hanes pointed out that full implementation of new and growing water pollution programs may be impeded due to a lack of available manpower equipped with the necessary skills.

Senator KENNEDY also provided the committee with correspondence between himself and the Secretary of Labor, W. Willard Wirtz, in which the Senator, among other things, suggested the desirability of convening "a national conference to determine the needs of skilled workers created by recent legislation designed to improve our natural environment, and whether our Federal programs are adequately oriented to meet the needs."

The committee believes Senator KENNEDY's suggestion to be of the highest order of importance and urges that—

(1) The Federal Water Pollution Control Administration report to the Congress on the question of skilled manpower for operation of pollution control programs;

(2) That such national conferences as recommended by the Senator be called at the earliest date consistent with orderly procedure; and

(3) That the Department of Labor and the Department of Health, Education, and Welfare reexamine existing manpower development programs and other education programs to determine the extent to which those programs may be used for the training of needed skilled personnel.

Mr. MUSKIE. Mr. President, I am happy to support the amendment of the distinguished Senator.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Massachusetts.

The amendment to the committee amendment was agreed to.

[p. 15602]

Mr. JAVITS. Mr. President, I think it is a splendid bill. The Senator from Maine has taken care of many of the problems concerning which so many of us have been deeply concerned. I know what a monumental labor it has been. I congratulate the Senator on his work.



I know that many of our colleagues are deeply interested in the economy and in the Federal expenditures. This is a \$6 billion bill, but it is a \$6 billion bill because the Senator from Maine has had the graciousness and the generosity to accept other people's ideas. Too many of us do not do that here very often. It is a very good precedent.

The pending bill has taken much of the steam out of the argument concerning the \$6 billion bill. The Senator has pointed out very properly and nobly that it is a great deal of money but that the money does not have to be appropriated right away. The States will be encouraged by the passage of this bill to go ahead and spend the money on the theory that they will get it back ultimately.

In a State like New York, in which there is a \$1.7 billion project, the idea of being able to get reimbursed for money being spent currently—which we can raise by credit and other means—makes us able to proceed. We will take our chances and the risk that ultimately the Federal Government will reimburse us. However, I point out the experience that we have had and why this is such a brilliant provision in the bill.

The New York Thruway—the first of the great trunk roads through the States—was followed by others in the country, and it has literally revolutionized our land.

There was no Federal road program at the time of its construction. We are still trying after all these years to get some Federal reimbursement for what is in effect an interstate highway—the New York Thruway.

New York would not have gone ahead with the great sewer construction program which our voters have authorized, by referendum incidentally, unless we had reassurance that we would be reimbursed for our expenditures.

I think the provisions incorporated in the bill by the Senator from Maine are very sound. The other provisions are splendid.

I am especially enthusiastic over what

amounts to the advance approval of a river compact with respect to a river basin.

This is a fine example of Federal-State cooperation in a most elementary effort in our country toward the preservation of the water and its purity. I think that the Senator from Maine has every right to derive enormous satisfaction from his role in leading us into the enactment of this measure which I hope will soon be enacted.

Mr. MUSKIE. Mr. President, I want to express my appreciation to the Senator from New York not only for his remarks this afternoon, but for the strong support and leadership he has provided in introducing legislation, some of the ideas of which are incorporated in the pending bill. I also thank him for prodding those of us on the committee to continue our efforts on this problem.

I do appreciate the comments of the Senator this afternoon.

Mr. JAVITS. Mr. President, I thank my colleague. I point out that taking the ceiling off all these individual and collective projects is tremendously helpful to a big industrial State and is another major contribution in the bill. I thank the Senator.

[p. 15603]

The Senate resumed the consideration of the bill [S. 2947] to amend Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

Mr. MUSKIE. Mr. President, I ask for the yeas and nays on the pending bill.

The yeas and nays were ordered.

Mr. NELSON. Mr. President, I rise to support S. 2947, the Clean Rivers Restoration Act. This bill is the result of extensive research and hearings by the Air and Water Pollution Subcommittee of the Public Works Committee, under the chairmanship of the distinguished Senator from Maine [Mr. MUSKIE]. Senator MUSKIE and the other members of the subcommittee are to be

commended for once again bringing to the floor of the Senate comprehensive and forward-looking legislation through which our energies and resources can be mobilized for the battle against water pollution.

The Clean Rivers Restoration Act extends and expands the Federal water pollution control program in several important respects. It is a significant and logical addition to the series of pol-

[p. 15605]

lution control laws beginning with the Federal Water Pollution Control Act and the important amendments to that law, such as the Water Quality Act passed by the Congress last year.

One of the most important features of this bill is a provision which would organize water pollution control planning according to river basin. Water pollution does not, of course, respect State, municipal or agency boundary lines. The pollution of our major rivers does not mean that they are polluted only in the vicinity of major cities, but that they are polluted along their entire courses, from their sources to their mouths. In these circumstances, pollution control programs designed for particular cities or vicinities without regard to the situation throughout the drainage basin cannot be expected to do an effective job of cleaning up our rivers. Under the clean rivers restoration program proposed by this bill, comprehensive plans for the control and abatement of pollution throughout river basins would be prepared, and economic incentives would be provided to insure that waste treatment was adequate to meet water quality standards established by the plan. Only through the adoption of such a comprehensive plan in every river basin will we be able to eventually meet our national water pollution problem.

Another important feature of this bill is the provision for expanded research and development. Our methods of collecting and treating domestic wastes have not changed for half a century.

Many industrial wastes are not amenable to conventional treatment, and new methods must be developed. We need extensive work on the problem of combined storm-sanitary sewers, on joint municipal-industrial systems, and on advanced waste handling and waste treatment methods. I feel that the expanded research programs and fund authorizations provided by this bill will go a long way toward bringing about the technological breakthroughs upon which much of the future progress in water pollution abatement and prevention will depend.

Although I will not discuss them in detail, there are many other outstanding features of this bill. The provisions for an estuary research program, the mandatory pollution report requirement, the regulation of oil pollution from vessels and terminals, to mention but a few of these provisions, will fill important needs in our overall national pollution control program.

Mr. President, I feel that the gravest immediate problem confronting us in the pollution battle is the vast requirements of our cities—large and small—for waste collection and treatment facilities. The Federal program for assisting municipalities to construct waste treatment works has resulted in a tremendous acceleration of construction work. S. 2947 makes a significant contribution to expanding this program. Under the clean rivers restoration program, the Federal Government may make grants up to 50 percent of the cost of treatment works provided that the State pays at least 30 percent of the cost. The Federal contribution under this program may be further increased by grants under the Appalachian Regional Development Act and the Public Works and Economic Development Act.

Amendments to the existing Federal cost-sharing program remove the dollar ceilings on grants and substantially increase the Federal proportion of construction costs if a treatment works is part of a comprehensive plan. Other

amendments provide for retroactive reimbursement of money expended for qualified treatment works construction projects, and establish a loan program to help municipalities meet the costs of treatment works construction. These changes in and additions to the Federal program to encourage the construction of municipal treatment works are badly needed and will greatly strengthen that program.

Under this bill, it would be possible for a municipality to get a Federal grant of up to 40 percent of the cost of treatment plant construction under the amendments to the existing Federal grant program, and up to 50 percent under the clean rivers restoration program. The bill would authorize a total of \$6 billion for the next 6 fiscal years to finance grants under both these provisions. I feel very strongly that both the proposed Federal grant levels and the authorization for funds to finance these grants are inadequate for the needs to be met.

I believe that meeting these rapidly mounting needs of our cities for adequate waste collection and treatment systems should be a national responsibility with a No. 1 priority. The pollution crisis around our cities is deepening so rapidly that the Federal Government cannot any longer sit back and insist that other units of government solve the problem. The fact is that the job is not being done and never will be done unless we make it an urgent responsibility of the Federal Government. If the building of interstate highways is a task so urgent as to require 90-percent Federal financing, certainly the saving of our lakes and rivers is equally urgent and equally national in its significance.

Mr. President, I send to the desk an amendment and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk proceeded to read the amendment.

Mr. NELSON. Mr. President, I ask unanimous consent to dispense with the reading of the amendment.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment offered by the Senator from Wisconsin [Mr. NELSON] is as follows:

On page 13, line 18, strike out "not exceed" and insert in lieu thereof "be"

On page 13, line 20, before the semicolon insert a comma and "except that such per centum shall be increased by the per centum (not in excess of 20) which is equal to the per centum of such costs which the State in which the project is located agrees to provide"

On page 14, line 21, after the semicolon, insert "and"

On page 14, beginning with line 22, strike out all through line 25.

On page 15, line 1, strike out "(6)" and insert in lieu thereof "(5)".

On page 24, line 16, beginning with "no grant" strike out all through "exceeding 30" in line 17, and insert in lieu thereof "the grant for any project shall amount to 50"

Mr. NELSON. Mr. President, I ask unanimous consent that at the conclusion of my brief statement there be printed in the RECORD materials taken from the report "Disposal of Municipal Sewage—Water Pollution Control and Abatement," 12th report by the House Committee on Government Operations, prepared by the Natural Resources and Power Subcommittee, March 24, 1965.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1)

Mr. NELSON. Mr. President, I have had the privilege of serving on the Subcommittee on Air and Water Pollution of the Committee on Public Works, under the chairmanship of the distinguished Senator from Maine [Mr. MUSKIE], for a period of 2 years. That committee, under the leadership of the Senator from Maine [Mr. MUSKIE] has been conducting hearings on air and water pollution for almost 4 years.

The pending bill is one of the fruitful results of these extensive and probing hearings into the question of water pollution in this country.

I believe that the Senator is to be commended for having brought to the floor of the Senate the most comprehen-

sive, most forward-looking, and finest water pollution control bill that has ever been brought to the floor of the Senate to my knowledge, for active consideration by the Congress.

The bill would make an authorization of \$6 billion, which is a substantial step in the right direction. The amendment I sent to the desk aims to change the formula in the bill. In the bill, there is a grant of up to 30 percent to the local municipalities, and up to 50 percent if the States are willing to match with 30 percent. The amendment I sent to the desk would make the grant 50 percent to local municipalities, and would match the State up to 20 percent, making a total amount of 90 percent. In other words, the Federal Government would make a grant of 50 percent to the local municipalities and another 20 percent if the State will match the 20 percent, making the Federal grant a total of 70 percent. The total grant to the municipalities, under those circumstances, would be 90 percent.

I think that ultimately—although this is the best grant feature that has been contained in any bill ever taken up in Congress for consideration—we will have to go into the position of “upping” the matching funds of the Federal Government to local municipalities far beyond what we have done in the past, and far beyond what it is contemplated to do in the pending legislation.

[p. 15606]

If we were to sit down, consider the most serious domestic problems confronting this country today, I believe that the problem of the status of the quality of our environment would rank as the most urgent one.

To one degree or another, we have polluted every river basin in America. We have polluted the shorelines of nearly every major city in America. We have almost destroyed the water in Lake Erie, we are well underway in the pollution of Lake Michigan, and are beginning the pollution of Lake Superior. We

are well on our way to polluting that magnificent lake, high in the mountains, Lake Tahoe, and are beginning the pollution of the ocean. In fact, we now find that in the Antarctic, DDT has been found in the fatty tissues of the Adelie penguins and yet no DDT has been used within 1,000 miles of the Antarctic.

We are well on our way to a serious pollution of the air over this country. The whole issue of the quality and the status of our environment is, I think, the most significant and important domestic issue confronting this country today. When, finally, we get around to tackling the full force of the whole question of water pollution in this country, I think we will be facing a problem with a price tag on it so nowhere in the neighborhood of \$75 billion to \$100 billion. Everyone says that is a lot of money, and of course it is a lot of money to spend in the next 15 or 20 years to clean up the water in America. However, it is only about the equivalent of 1½ years' defense budget. I think the question of maintaining and raising the quality of the environment in which we live in the next 15 to 20 years is worthy of the investment of money equivalent to a defense budget expenditure of a year and one-third.

#### EXHIBIT 1

OUR COUNTRY'S STREAMS CAN NO LONGER ASSIMILATE THE EVER-INCREASING WASTES DISCHARGED INTO THEM

(Materials taken from the report “Disposal of Municipal Sewage (Water Pollution Control and Abatement),” 12th report by the House Committee on Government Operations, prepared by the National Resources and Power Subcommittee, Mar. 24, 1965)

Satisfactory development of urban society depends on adequate disposal of the complex wastes resulting from community living. Water pollution, therefore, is both a symbol and affliction of the growth of modern civilization. It adversely affects the continued growth, health, and development of the United States.

The water-carriage system for the disposal of household and industrial wastes from our cities and towns developed because of its simplicity and apparent economy. The city sewer offered a relatively inexpensive means for removing offensive and potentially dangerous wastes from our immediate sur-

roundings and discharging them to a water-course for disposal beyond sight, smell, and conscience. This practice was tolerated by the America of a half-century ago, because the streams were often able to assimilate the discharge. As a result, stream pollution was minor and local in nature.

Today, however, our cities are no longer isolated from one another by long reaches of streams. In the increasingly urban America of today, our communities are growing closer and closer together. Water supply intakes and waste outlets are intermingled along our watercourses, and the assimilative capacities of our streams are no longer able to cope with the ever-increasing loads of pollutional materials discharged into them.

**SINCE 1900, MUNICIPAL SEWAGE DISCHARGES HAVE QUINTUPLED, AND THEIR POLLUTIONAL EFFECT HAS TRIPLED**

At the turn of the century, approximately 950 communities in the United States had sewers, serving about 24.5 million persons. A scant 60 communities provided partial treatment for the sewage of 1 million persons and the remainder discharged their wastes untreated. In 1900, the municipal wastes reaching streams had a pollutional effect equivalent to the raw, untreated sewage from a population of about 24 million.

The number of communities now served by sewers totals more than 11,400; and the number of persons served by those sewers totals over 118 million. Of these, about 9,300 municipalities now have either primary or secondary sewage treatment facilities, which serve about 102 million people.

Despite this progress, the total amount of municipal pollution has not decreased. On

the contrary, municipal pollution has substantially increased as a result of growing population, obsolescence of older treatment plants, failure to construct needed sewage treatment plants, increased interception of industrial wastes by municipal sewers, and the ever-increasing number of water-using devices in the home (multiple baths, garbage grinders, automatic laundries, etc.) By 1960, the municipal sewage discharged into our streams, treated and untreated, was almost 5 times the amount discharged in 1900, and its pollutional effect was equal to the untreated sewage from more than 75 million people, or triple the amount in 1900.

The following table I shows the growth in the sewered population, the increase in municipal sewage pollution, and a projection, based on expected urban growth, estimating conditions which will exist in 1970 and 1980 under alternate assumptions—(a) if all communities provide secondary treatment by 1980, and (b) if construction of sewage treatment facilities continues at the present rate. These projections for 1970 and 1980 also assume that municipalities will continue to intercept acceptable industrial wastes.

The projections in table I show that even if the municipalities of this Nation provide secondary treatment with conventional methods by 1980 for all the sewered population, the amount of pollution reaching watercourses in 1970 and 1980 will be substantially the same as today. More importantly, these projections show that unless the construction of municipal sewage treatment plants is substantially accelerated, water pollution will continue to increase and will be intolerable in numerous places long before 1980.

TABLE I.—POPULATION SERVED BY SEWERS AND SEWAGE TREATMENT, 1900-80<sup>1</sup>  
[In millions]

Year	Sewered population	Served by treatment	Discharging raw sewage	Population equivalent discharged
1900	24.5	1.0	23.5	24
1920	47.5	9.5	38.0	40
1935	69.5	28.4	41.0	51
1950	80.0	54.0	26.0	60
1960	105.0	80.0	25.0	75
1970	152.0	<sup>2</sup> 137.0 <sup>3</sup> 124.0	<sup>2</sup> 15.0 <sup>3</sup> 28.0	<sup>2</sup> 78 <sup>3</sup> 85
1980	200.0	<sup>4</sup> 200.0 <sup>5</sup> 170.0	<sup>4</sup> None <sup>5</sup> 30.0	<sup>4</sup> 70 <sup>5</sup> 114

<sup>1</sup> Data taken or extrapolated from "Modern Sewage Disposal," Federation of Sewage Works Association, 1938; "1957 Inventory of Municipal and Industrial Waste Facilities," USPHS, and unpublished data from U.S. Public Health Service.

<sup>2</sup> Assumes that progress toward secondary treatment for all municipal wastes by 1980 will be made; a per capita population equivalent (PE) of 1.6; and 80 percent removal of PE by secondary treatment.

<sup>3</sup> Same as 2, except assumes present rate of sewage treatment construction will continue.

<sup>4</sup> Assumes that all sewered population will be served by secondary sewage treatment by 1980, a per capita population equivalent (PE) of 1.75; and 80 percent removal of PE by secondary treatment.

<sup>5</sup> Same as 4, except assumes present rate of sewage treatment construction will continue.

The metropolitan area of Chicago provides a classic example of profound difficulties resulting from the growing problems of municipal sewage disposal. Although Chicago has very efficient sewage treatment facilities, the city's waste discharges are equivalent to the untreated sewage of over 1 million persons and contain solid wastes suspended and in solution, amounting to 3,400 tons per day.

ALTHOUGH SUBSTANTIAL PROGRESS HAS OCCURRED IN CONTROLLING POLLUTION FROM MUNICIPAL SEWAGE, THE TOTAL POLLUTION LOAD ON AMERICA'S WATERS IS STILL INCREASING

The construction of needed municipal and industrial waste treatment facilities is one of the most important elements of effective water quality management, and requires expenditure of substantial money. The inventory data now collected at 5-year intervals by the States and consolidated by the U.S. Public Health Service demonstrate both the steady improvement and the vast unfinished work still to be done in the control of pollution from municipal wastes. Table II summarizes these data for 1945, 1957, and 1962 (the most recent inventory of municipal waste facilities).

Table II shows (a) that in the 17-year period 1945-62, sewerage communities increased from 8,917 to 11,420; (b) that the population served by sewers increased from 74,740,887 to 118,371,919, while those discharging raw sewage decreased from 27,867,783 to 14,686,941, and (c) that secondary treatment plants increased from 2,799 to 6,584, serving a population which increased from 21,659,504 to 61,191,352.

These figures are indeed important indicators of progress in controlling pollution from municipal wastes. Particularly significant is the great and rapid rate of progress made since 1957 when the Federal construction grants program began to operate.

However, table II also shows that in 1962 (a) there were 2,249 sewerage communities, serving 14,686,941 people, still discharging raw sewage; (b) of those communities having sewage treatment plants, 2,794 plants serving 42,493,626 people provided less than secondary treatment; and (c) 1,923 of the sewerage communities had combined sewers and storm drains through which raw sewage could overflow into watercourses at times of heavy rain.

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TABLE II.—SUMMARY OF MUNICIPAL WASTE DISPOSAL FOR THE UNITED STATES

General	1945 (number)	1957 (number)	1962	
			Number	Population
Number of communities—				
With sewer systems . . . . .	8,917	11,131	11,420	
Discharging raw sewage only . . . . .		3,065	2,139	11,060,516
Discharging treated sewage only . . . . .		7,966	9,171	94,139,370
Discharging both raw and treated sewage . . . . .		100	110	13,172,033
Type of sewers (number of communities).				
Separate . . . . .	6,844	8,632	9,083	57,309,049
Combined . . . . .	1,470	1,451	1,305	25,964,055
Multiple systems of both combined and separate . . . . .	373	428	618	33,836,027
Not stated . . . . .		620	414	1,262,788
Census population of sewerage communities . . . . .	82,012,692	102,047,712		123,406,458
Estimated population:				
Connected to sewers . . . . .	74,740,887	98,361,396		118,371,919
Discharging raw . . . . .	27,867,783	21,917,665		14,686,941
Discharging treated . . . . .	46,865,114	76,443,731		103,684,978
Treatment				
Treatment plants, total . . . . .	5,786	7,518	9,378	
Minor <sup>2</sup> . . . . .	69	41	37	
Primary . . . . .	2,829	2,730	2,672	
Intermediate <sup>3</sup> . . . . .	98	100	85	
Secondary . . . . .	2,799	4,647	6,584	
Estimated population served by—				
Minor treatment <sup>2</sup> . . . . .	4,269,960	1,860,330		2,350,845
Primary treatment . . . . .	17,172,560	25,666,745		32,733,831
Intermediate treatment <sup>3</sup> . . . . .	3,763,090	5,590,952		7,408,950
Secondary treatment . . . . .	21,659,504	43,325,704		61,191,352

<sup>1</sup> Includes population of 7,990 connected to semipublic, industrial, and institutional facilities not included in the "Discharging raw" or "Discharging treated" items.

<sup>2</sup> Less than sedimentation.

<sup>3</sup> More than sedimentation (primary treatment) but less than secondary treatment.

These ominous figures, demonstrating the large backlog of municipal wastes still requiring treatment, show only part of the job still remaining to be accomplished. The rapidly increasing population and urbanization of the United States, plus the enormous increase in complex chemicals and other products of our expanding industry, are constantly creating greater and greater quantities of municipal waste and resulting increases in pollution problems. An especially perceptive analysis of the present status of the struggle to control pollution from municipal waste discharges was made by Assistant Secretary of HEW James Quigley when he testified at the hearings as follows.

"Mr. McCLORY. Actually, Mr. Secretary, under existing law, and under existing programs of, primarily, States and municipalities, and private industries, we are making steady and substantial progress in solving pollution problems, are we not?"

"Mr. QUIGLEY. We are making progress, relatively speaking.

"Maybe I am expressing it wrong. What I am saying is that we are doing something about the problems we are faced with. But whether we are just treading water, just breaking even, or perhaps even still losing ground, this is what bothers me. In other words, I think we can be rightfully proud and take credit for the efforts that are being made at the State levels in many States, by activities of interstate agencies in a number of instances, and by the impact of the Federal program. But I think the worst mistake we could make is to assume that because in the last 5 years we have done this much, the problem is well on its way to solution. It is not, and I think if you have an opportunity to review that technical paper that I submitted, it will be clearly demonstrated that things are going to get worse before they get better.

\* \* \* \* \*

"Mr. McCLORY. In other words, we are losing the battle of solving the pollution problem. We are not gaining on it.

"Mr. QUIGLEY. Let me put it this way. I think we have established a beachhead, but the battle is far from won. We can still be driven back into the sea. But I don't think we will. I think that the impetus and the support that the Congress has given to this program, the way it beefed up and expanded it and enlarged it in 1961, is pretty clear now; and it is becoming clearer every day in the minds of a lot of people at the State level, that the Federal Government is serious about this business of water pollution control. And I think just this fact alone makes the job of the water pollution control official at the State level a lot easier."

E. THE FEDERAL CONSTRUCTION GRANTS PROGRAM

HAS SUBSTANTIALLY INCREASED THE RATE OF CONSTRUCTION OF SEWAGE TREATMENT PLANTS BUT HAS NOT ENDED THE PROBLEM OF MUNICIPAL SEWAGE DISPOSAL

The Federal construction grants program was initiated by the 1956 Federal Water Pollution Control Act of July 9, 1956 (70 Stat. 498; 33 U.S.C. 466a et seq.) (Public Law 660, 81st Cong.). This program was initiated because Congress had found that the construction of sewage treatment plants has fallen below the level necessary to provide for the Nation's expanding population and to replace obsolescent and aging facilities, to say nothing of the backlog of needs which developed during the 1930's and became intensified during World War II. Unlike almost any other community facility, a waste treatment plant benefits largely those who live outside the community—the downstream water users. The people of a municipality will approve an increase in the public debt to build streets to drive on, water systems for essential water supply, and sewer systems to rid the premises of waste, with more enthusiasm than they will for effective waste treatment facilities at the point of disposal.

The Federal Water Pollution Control Act of 1956 stimulated local efforts to control pollution from municipal wastes by authorizing annual appropriations of \$50 million for grants of up to 30 percent of the cost of sewage treatment works or \$250,000 for each project, whichever was larger. Under this grant program, the construction of needed sewage treatment facilities markedly increased—but not enough. Because of the \$250,000 limitation on a grant for any one project, the program offered little incentive to larger communities and did not encourage neighboring communities to join together to construct the more effective and less expensive multimunicipal waste treatment projects. Moreover, the statutory formula for allotting appropriated funds among the States did not consider the variation in water pollution problems of the States, and there was inadequate mechanisms for balancing funds with needs.

In 1961, Congress amended the Federal Water Pollution Control Act by enacting the act of July 20, 1961 (75 Stat. 204; 33 U.S.C. 466a et seq.) (Public Law 87-88). The 1961 act changed the Federal construction grants program to—

(1) Authorize increased annual appropriations of \$80 million in fiscal year 1962, \$90 million in fiscal year 1963, and \$100 million for the fiscal years 1964 through 1967.

(2) Increase the 30-percent grant limitation from \$250,000 to \$600,000.

(3) Encourage communities to construct joint sewage treatment projects by applying the individual grant limitation to each community's share of the cost of such projects,

up to a maximum grant of \$2.4 million.

(4) Specified that State allotments which are not used in a fiscal year (a) may be used for additional grants to uncompleted projects where the need is due, in part, to any Federal institution or Federal construction activity, and (b) shall be reallocated to States having projects for which grant funds would otherwise be lacking.

Congress approved annual appropriations totaling \$584 million for construction grants for the period 1957 through June 30, 1965, including the full authorized amounts of \$80 million for fiscal year 1962 and \$90 million for fiscal year 1963. Grants of an additional \$109 million under the accelerated public works program resulted in construction of additional treatment facilities in 1963 and early 1964. Although appropriations for construction grants for fiscal year 1964 and for fiscal year 1965 were only \$90 million each, the Congress specifically provided that allotments for such grants during the fiscal year "shall be made on the basis of \$100 million." Under this provision, unallocated funds not used by several States were reallocated to provide full allocation of funds to projects in other States in fiscal years 1964 and 1964.

From the beginning of the program to February 28, 1965, there were 6,028 projects approved for grants of \$640.6 million. This includes 783 projects aided in whole or in part by the \$109 million made available under the accelerated public works program authorized under the act of September 14, 1962 (76 Stat. 541; Public Law 87-658). Local communities have supplied an additional \$2,424 million to meet the total project cost of \$3,064 million. This is a ratio of 4 local dollars to each Federal dollar in grants-in-aid. Approved projects will serve a population of 48 million and will improve the quality of water in about 52,000 miles of streams. However,

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the backlog of applications on February 28, 1965, totaled 1,470 seeking \$181.3 million in grants to support projects costing \$904.1 million.

The dramatic growth in the level of construction of municipal waste treatment plants resulting from the Federal construction grants program is shown in figure 3. In addition, the higher increased grant ceiling authorized under the 1961 act has resulted in construction of larger projects and a higher level of expenditure of local funds. The average project cost rose from \$470,000 under the 1956 act to \$600,000 in 1961, and the local share of project costs rose from \$4.70 to \$5.40 for each Federal dollar in grants. Moreover, with larger projects, the proportion of Federal grant aid going to cities of over 50,000 population increased from 13 percent under

the 1956 act to 23 percent under the 1961 amendments. In 1963, the rate of construction and the grant percentages were further increased with the \$170 million of construction aided by the supplemental grants under the accelerated public works program. The expiration of this supplemental aid resulted in the decrease of construction in 1964.

The initial Federal grants of \$50 million per year increased construction sufficiently to balance population growth and obsolescence, but had little effect on the backlog of needed waste treatment facilities. Since 1961, there had been a steady reduction of that backlog with respect to sewered communities, but this progress has been largely offset by the growing increase in needs for waste treatment facilities to serve communities which still are without sewers.

The committee hearings clearly showed that the rate of decrease in the backlog is still too small to assure adequate control of the municipal sewage problem in the near future. Every effort must be made to expedite the full implementation of the Federal construction grants program at its maximum authorized level. The committee believes that it is imperative to maintain continuous scrutiny, review, and appraisal of the municipal sewage problems and to raise the level of the program sufficiently in advance to meet the developing needs and expedite reduction of the backlog of needed waste treatment facilities.

#### AN ENORMOUS BACKLOG OF NEEDED TREATMENT FACILITIES STILL EXISTS

The 1964 annual survey of municipal waste treatment needs, conducted by the Conference of State Sanitary Engineers in cooperation with the Public Health Service, reported that 1,533 communities presently discharging raw sewage urgently require new plants for the treatment of wastes generated from a population of 12 million. An additional 1,462 cities and towns with existing treatment plants require new or enlarged facilities because of obsolescence, insufficient treatment, or inadequate capacity. These communities presently discharge inadequately treated wastes from a population of 19 million. The Conference of State Sanitary Engineers also reported that 2,677 unsewered communities require sewer systems and sewage treatment plants to serve a population of 5.2 million. These unsewered towns frequently experience serious ground-water pollution and other public health problems because of individual disposal of sewage. The estimated cost, at current prices, of the present backlog of these 5,672 needed projects, to serve these 35.8 million people, is at least \$1 billion for treatment plants and \$0.9 billion for interceptor and outfall sewers and other ancillary works, i.e., a total cost of at least \$1.9 billion.



(1) *Additional needs caused by population growth.*—The population served by sewer systems in the United States increased from 98.4 million in 1957 to 118.3 million in 1962—a 20-percent increase in 5 years. The urban population increased from 96.5 million in 1950 to 125.3 million in 1960—an increase of 30 percent for 10 years or 15 percent for a 5-year period. According to estimates by the Public Health Service the future population which must be served by sewer systems is as follows: 1965, 132 million; 1970, 152 million; 1975, 174 million; and 1980, 200 million.

(2) *Additional needs caused by obsolescence of present treatment facilities.*—The municipal waste treatment works currently in operation will eventually have to be replaced because of obsolescence, since the average effective life of treatment plants is 25 years and that of interceptor and outfall sewers is 50 years. The Public Health Service estimates that it will cost at least \$3.3 billion to replace the existing treatment plants and at least \$2.6 billion to replace their related ancillary works.

The above-mentioned costs of construction required to eliminate the backlog of needed municipal waste treatment works and to provide for continuing obsolescence and population growth within specified periods of time were estimated in terms of today's construction cost. The actual costs, however, will be higher because of the steady upward trend of construction costs. A projection based upon past experience indicates that an annual construction rate of approximately \$698 million (in terms of 1963 construction costs) must be maintained through 1973 to substantially reduce the backlog and keep abreast of new needs arising from obsolescence and population growth. Actual costs will be about \$100 million per year higher, assuming that construction costs increase an average of 3.5 percent per year.

**POLLUTION FROM COMBINED SEWERS AND STORM DRAINS IS A SIGNIFICANT AND INADEQUATELY CONTROLLED ASPECT OF MUNICIPAL WASTE DISPOSAL**

The discharge of mixed raw sewage and storm water into our streams by overflows from combined sewer and storm drain systems is one of the most difficult water pollution problems confronting us today.

The sewer systems in many of our older cities were developed in the 19th century before there was concern over pollution of the receiving streams and treatment of wastes. To the engineer of that day it seemed logical to collect both storm water and sanitary sewage in a single combined sewer system. A single sewer system was much less expensive than two separated systems; and the point of discharge was the same—the nearest stream. The future pollution effect of the

combined system of sewers and storm drains was simply not recognized. Indeed, it would have taken exceptional vision to have foreseen the problems that now face our cities in the collection and treatment of wastes and the management of our water resources.

The problems result from the way in which the combined system operates. During periods of rainfall, the combined sewer system must carry mixed sewage and storm water which is many times its "dry weather flow." Because it was not considered economically feasible to build treatment plants to handle the entire flow of mixed rainwater and sewage, the sanitary engineer designed the sewer system with weirs (low dams) so that at some predetermined level—usually two to three times dry weather flow—the mixed flow of sewage and storm water would discharge directly into the watercourse without going through the treatment plant. As the municipalities grew and increased in population, the increasing flow of sewage left little or no reserve capacity in the combined system to handle storm water. Under these circumstances, sewage will overflow even during light rainfall. During heavy rainfall, a mixture of sewage and storm water virtually equal to the runoff will bypass the treatment plant and be spewed directly into the watercourse, along with large amounts of sewage sludge which have been deposited in the sewers. These overflows thus carry large amounts of pollution into the watercourses.

The intermittent nature of the sewage overflows is especially detrimental to the waters. Normal waste flows can be controlled to assure relatively constant levels of water quality for desirable uses. Storm overflows, however, introduce slugs of pollution which can upset an otherwise stable regime. Even with complete treatment of dry weather sewage, the pollution discharge intermittently from storm water overflows can seriously impair the usefulness of a stream.

As shown in table II above, in 1962 there were 1,305 communities whose sewer systems were entirely combined and 618 communities whose sewer systems were partially combined, making a total of 1,923 communities facing the problems which come from combined sanitary sewers and storm drains.

Up to now, few studies have been made to determine the composition of combined sewage and storm water overflows and to evaluate their influence on stream pollution. Even where detailed studies have been made, the information is often not applicable to other cities because their precipitation patterns, character of the runoff area, capacities and designs of their sewer systems, and the conditions in the receiving waters, are not comparable.

It is clear that the sewage overflow from combined sewer systems is an important

source of water pollution. For example, according to a recent investigation by the Public Health Service, the total pollution load entering the streams from combined sewer overflows in Chicago in 1962 was equivalent to the untreated wastes from a population of 280,000. Chicago's problem is compounded by the multiplicity of its overflows (approximately 300 on the main channels and an undetermined number on tributary streams).

Some years ago the city of Buffalo, N.Y., made comprehensive studies of its combined sewer systems. Those studies showed that about one-third of the city's annual production of sewage solids overflowed without treatment, even though only 2 to 3 percent of the liquid sewage volume actually overflowed. This large overflow of sewage solids resulted from the settling of solids in the sewer systems during periods of dry weather flow and their subsequent flushing out and overflow with the first surge of storm water. There is no reason to suppose that this situation is not applicable, in greater or lesser degree, to all combined sewer systems. This important finding has not, however, received sufficient attention from the engineering profession, regulatory agencies, or public officials.

To correct the problem of pollution from combined sewer overflow by relocation and reconstruction of the sewer systems would require tremendous expenditures. According to the Public Health Service, the minimum cost for the separation of all combined systems in the United States would be between \$25 to \$30 billion.

Alternative and less costly solutions in many cases might be to provide storage basins, or treatment, for the overflows. In such systems, the excess flows would be taken off at the overflow structures and retained in storage basins for treatment at the municipal plant or at special treatment units designed for this purpose. However, in large and congested cities, the overflow outlets are generally located in areas which are too restricted or unavailable for storage or treatment installations, and it would be very costly to construct conduits to carry the overflow to available sites for storage or treatment. The feasibility of overflow treatment is, therefore, largely dependent on the cost and availability of sites for treatment facilities.

The director of the Bureau of Environmental Health, Pennsylvania Department of

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Health (Mr. Karl M. Mason), testified as follows concerning this problem:

Mr. INDRITZ. Do you have any suggestions for solving the combined sewer and storm drain problem, other than by separation?

"Mr. MASON. Yes; we feel, in some of the major cities, and the one that I mentioned in Pennsylvania, namely Philadelphia, Pa., that upon the basis of study it might come out that the actual treatment at various points in the systems of the combined wastes might be cheaper and better, more effective in the long run, than going into the central cities and tearing them up to separate the two.

"We don't know this. All that we feel is that there should be given flexibility, we believe, in that portion of the act for someone to look into the matter to see if that might not be the better way. This is a major problem.

"As you know, Washington has it right here. How are you going to take these 8-, 10-, 14-foot-diameter sewers and separate them? It might in some way be cheaper to take that combined waste at various points along the collection system and treat it.

"Mr. INDRITZ. Has your board conducted any specific research on the subject?

"Mr. MASON. No; we haven't."

The precise extent and solution of the problem of overflow from combined sewer systems are not accurately delineated at this time. There is, however, sufficient evidence to conclude that combined sewer and storm drain systems are a major source of pollution. They should be promptly and fully studied and remedial steps should be taken as early as possible.

The magnitude of the problem makes it unlikely that it can be solved solely by the cities themselves. Although the damage to water quality resulting from combined sewer systems is, like most water pollution, local in origin, its total impact has national effects. The committee therefore believes that the Federal Government should participate in seeking remedies for the problem, and recommends that Federal grants be provided to municipalities which establish demonstration projects approved by the Department of Health, Education, and Welfare to test the feasibility of new or improved methods of controlling the discharge of untreated or inadequately treated sewage from combined sewer systems. The committee recommends that in making such grants the Department give preference to those demonstration projects whose results would be applicable to more than one community. To assure more comprehensive and wide spread research and development in these demonstration programs, the committee believes that the grant program should be at a level of at least \$20 million per year for the next 5 years, and that, except in unusual instances, the grant for any single project should not exceed 5 percent of the total grant funds appropriated for the fiscal year.

THE PROBLEM OF FINANCING MUNICIPAL

# CONSTRUCTION OF SEWAGE TREATMENT PLANTS IS DIFFICULT

One of the greatest problems which a local community faces in building sewage treatment facilities is that of obtaining the necessary money at fair and equitable rates, with the requisite consent of property owners and citizens. Sewage treatment facilities are costly to build and operate, and usually have an inverse relationship to a municipality's ability to pay. For example, the Public Health Service estimates that the average cost of providing primary sewage treatment considering amortization of capital cost, interest, and operation and maintenance costs) is \$21.41 per million gallons in a treatment plant with a capacity of 100 million gallons per day as compared to \$77.59 per million gallons in a plant with a capacity of 1 million gallons per day.

State laws provide the framework which controls local government financing. In many instances, bond sales are limited by both statutory and constitutional provisions. Many of these legal provisions were developed in periods of economic depression, and their stringency was intended to assure local fiscal responsibility. They have become unduly restrictive in recent years and have impeded the construction of public works which, because of postponed construction during the depression and war periods, are now urgently needed by many local communities.

These restrictions, in varying degree, take one or several of the following forms:

- (1) Debt limitations which restrict the outstanding debt to a percentage of the assessed valuation of local real estate;
- (2) Tax limitations which restrict the rate that can be levied to provide debt service payments;
- (3) Interest rate limitations which restrict the percentage that can be paid for borrowed money; and
- (4) Provisions permitting only real property owners to vote on a bond referendum, as well as provisions requiring more than the majority vote for approval.

The two methods generally used by municipalities to borrow money for construction of waste treatment plants are (1) general obligation bonds and (2) revenue bonds. General obligation bonds generally have the advantage of a lower interest rate because the full financial resources of the community are pledged to their repayment. However, revenue bonds have become increasingly popular in recent years, since they often are exempt from constitutional debt restrictions.

Several States have used a variety of grants and other assistance to ease these burdens. However, few changes have been made in the restrictions on municipal bond financing,

and these restrictions still continue to retard ready access to the money market and thus unnecessarily increase the local government's cost of financing waste treatment plants.

These problems of municipal financing have been markedly alleviated by the grants made under the Federal construction grants program previously described in this report and by the loans available to municipalities under the public facility loan program administered by the Housing and Home Finance Agency under the Housing Amendments of August 11, 1955, as amended (42 U.S.C. 1491 et seq.). This program provides credit assistance to municipalities and other local public bodies for constructing essential public works where such credit financing is not otherwise available on reasonable terms and conditions. The program, when first initiated, has relatively limited funds available and its primary aim was to help small communities to secure needed public services. In recent years, the program has been greatly expanded to a point where loans are now made at a rate of \$100 million a year.

However, the law has had a provision prohibiting public facility loans under this program to any municipality or political subdivision with a population of 50,000 or more.<sup>1</sup> This 50,000 population limitation hampers governmental responsibilities for water supply and sewage disposal in metropolitan areas.

First, it directly discriminates against communities of 50,000 population or more by not permitting them to receive public facility loans.

Second, it encouraged fragmentation, duplication, and inadequate long-term facilities by prohibiting joint bond action by a number of communities within a metropolitan area to meet water and sewer needs. For example, several communities each having a population of less than 50,000 have been discouraged from joining together to provide a needed public utility such as a water or sewage disposal system, or connecting facility. Individually, each of the communities would be eligible for loan assistance under the public facility loans program. But when acting jointly (through the establishment of an instrumentality serving the entire area) they would be ineligible for Federal loan assistance.

<sup>1</sup> Title 42, United States Code, sec. 1492(b) (4). However, this section permitted loans to a community of up to 150,000 population if it is in a redevelopment area designated under sec. 5(a) of the Area Redevelopment Act (42 U.S.C. 2405(a)) because of having substantial and persistent unemployment for the periods of time prescribed in that act or if it is near a research or development installation of the National Aeronautic and Space Administration.

ance if their aggregate population exceeded 50,000

This population limitation operates directly counter to many existing program objectives for meeting metropolitan problems. For example, the Housing Act of 1961 stresses the desirability of cooperative action among municipalities and other political subdivisions in preparing comprehensive planning on a unified metropolitan basis (40 U.S.C. 458(c)). Also, the 1961 Federal Water Pollution Control Act encourages communities to construct joint sewage treatment works by joining each community's individual grant limitation (30 percent or \$600,000) to a maximum grant of \$2.4 million for a joint project.

Two partial steps to relieve the stringency of the 50,000 population limitation were taken in the Housing Act of September 2, 1964 (Public Law 88-560). Although the latter act did not repeal the 50,000 population restriction with respect to individual municipalities, section 601(b) of the act amended the law as follows: (1) It increased the limitation of 150,000 for any community in a redevelopment area designated under section 5 of the Area Redevelopment Act (42 U.S.C. 2405) (i.e., irrespective of whether the area was so designated because it has substantial and persistent unemployment for the periods of time prescribed under section 5(a), or because it has many low-income families and substantial or persistent unemployment or underemployment as prescribed under section 5(b) of the Area Redevelopment Act);<sup>2</sup> and (2) it authorized making loans to a public agency or instrumentality serving several municipalities, political subdivisions, or unincorporated areas if each of them to be served by the public facility for which the loan is obtained meets the 50,000 population restriction. The committee believes these are steps in the right direction, and recommends to the appropriate committees that consideration be given to removing the 50,000 population limitation itself.

The committee further believes that there should be greater recognition of the needs of communities which will experience substantial population growth and where the sewage facility needed to meet such growth will contribute to economy, efficiency, and the comprehensively planned development of the area. The Executive Director of the Advisory Commission on Intergovernmental Relations (William G. Colman) pointed out in his testimony at the committee hearings that since construction of waste treatment facilities to provide for future needs is not easily accomplished under revenue bond financing,

<sup>2</sup> This amendment would immediately qualify some 17 counties and 1 Indian tribe for public facility loans (S. Rept. 1265, 88th Cong., pp. 31-32).

other financial aid is desirable. He said:

"You can construct normally with revenue bonds only the trunklines of the sizes

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and so on that are needed to fill the needs of the population today, the ones who are going to be paying the water bills, as soon as the construction is finished, whereas with the population continually growing in the metropolitan areas, particularly in the suburbs, economy in the long run would dictate a larger outlay in terms of physical facilities in order to meet the needs of tomorrow's population as well as today's. And that is a difficulty that you encounter on the revenue bond approach

Now, the recommendation that the Commission made in that regard is that where Federal aid is involved in loans for these types of operations, provision be made for a deferral of interest for a number of years, where a clear case can be made that through deferral of interest and the use of larger facilities to meet the needs of the future population, the whole thing will pay out eventually. Then it is a saving from the standpoint of the water users to have the larger facilities."

We believe this suggestion would be a useful means of encouraging construction of waste treatment plants sufficiently large to provide for future population within a growing community.

Mr. MUSKIE. Mr. President, the distinguished Senator from Wisconsin has a longstanding and distinguished record of concern and leadership in this field. I valued his membership on the Subcommittee on Air and Water Pollution and regretted his decision to move to another committee assignment. He and I have had many discussions about this problem, its urgency, and the need for a massive increase in the Federal contribution toward its solution. I think we share equally that sense of urgency. Indeed, the pending legislation represents just that. In the sixth year of the program which the Senate is now considering, the Federal contribution will be 10 times its present level. More important is the fact that the pending bill would lift a number of limitations which inhibit the impact of Federal resources in those areas where the problem is the greatest.

I am speaking now of the heavily

populated industrial areas of the country. The pending bill will increase the Federal contribution—if all conditions set out in the bill are met—to 50 percent of the total cost of municipal waste treatment projects under the clean rivers program. There is built into the bill an incentive for the States to make their contribution. As I said earlier, the basic assumption of current Federal law is, the primary responsibility of pollution control rests with the States and communities. Yet, the States have failed, with exception of eight States which provide some matching funds to make any financial contribution whatsoever.

The solution to the problem is the incentive built into the bill to try to stimulate State action, through allocation of State resources, to help the communities of this country deal with the problem. If the provisions of the pending bill are fully implemented in any given State, the division of financial responsibility would be 50 percent Federal contribution, 30 percent State contribution, and 20 percent local contribution.

In the judgment of the committee, after extensive hearings and discussion, this represents an appropriate division of the responsibilities that should rest on all three levels of the Federal system.

Mr. NELSON. Mr. President, will the Senator from Maine yield for a question?

Mr. MUSKIE. I yield.

Mr. NELSON. The Senator mentioned that eight States have made a contribution. What is the maximum percentage contribution that any one of those eight States has made?

Mr. MUSKIE. The maximum provision is reflected in the bill. Maine and New York have contributed 30 percent of the cost. They make the largest contribution of any States to the cost of municipal sewage treatment projects. Six other States make contributions, some of which have a dollar limitation, and some of which have a smaller percentage limitation.

Mr. NELSON. But Maine and New York made a 30-percent contribution to-

ward the total cost of sewage treatment plant installations?

Mr. MUSKIE. Yes.

Mr. NELSON. What kind of dollar figure has that been representing in those two States?

Mr. MUSKIE. The New York program would be financed by a bond issue which was approved last year, in a referendum, totaling \$1 billion. The total cost for New York State is estimated at \$1.7 billion. The Maine program has been financed out of current appropriations and a bond issue of \$25 million last year.

Until last year, it was possible to finance the Maine program entirely out of current revenues. I do not know what the cumulative total of that contribution has been.

Mr. NELSON. Does the Senator from Maine know whether there will be any problem for some States respecting a constitutional prohibition against this kind of grant from general Treasury funds, or bonding to a local municipal treatment plant?

Mr. MUSKIE. I think there are some constitutional limitations on bonding. This bill does not require bonding.

Mr. NELSON. I refer to the authority of the State itself to take State general fund moneys and give it as a grant matching fund for local sewage treatment plants.

Mr. MUSKIE. I could not answer that question. There may be such. Does the Senator mean a constitutional limitation other than the bonding problem?

Mr. NELSON. Yes.

Mr. MUSKIE. If there is, I do not know of any. We have no testimony to that effect. However, we do have information that some States have bonding limitations, which may be an inhibition if they need to raise money by that method.

Mr. NELSON. I certainly did not intend, by remarks, in any way to indicate that I did not think this was a massive increase in Federal participation, because it is a massive increase. I hope

the bill will pass both Houses.

I think it is to the great credit of the chairman that we have been able to bring to the floor a bill providing for a \$6 billion participation by the Federal Government. I am sure the Senator agrees with me that in future years Federal participation will have to be increased if we are to meet the problem.

Mr. MUSKIE. I do. I agree to such an extent that it would be easy to rationalize support of greater Federal participation in dealing with this problem than the pending bill envisages, or even than the Senator's amendment envisages, but we must deal with the art of the possible. We have in the bill, if Congress passes it, a means for helping meet the needs of the problem we are talking about.

Mr. ERVIN. Mr. President, this bill deals with what is undoubtedly one of the foremost problems confronting our Nation. I think it deals with it in a very rational and practical manner. In my judgment, the distinguished Senator from Maine merits the thanks of the entire country for the untiring energy, thought, and effort he gave in the preparation of the bill and in the presentation of it to the Senate.

Mr. MUSKIE. I thank my distinguished friend from North Carolina, who helped immensely in his testimony before the subcommittee.

I think it is worth noting that Senators on both sides of the aisle, from all areas of the country, and of all philosophies, recognize the urgency of the problem, and are willing to support efforts to deal with it.

Mr. HARTKE. Mr. President, I wish to commend the members of the Public Works Committee, the distinguished chairman, JENNINGS RANDOLPH, and the distinguished Senator from Maine, Senator MUSKIE, for giving us S. 2947—a comprehensive approach for pollution abatement and water reclamation—in order to provide our Nation with usable clean water for the future.

S. 2947, the Federal Water Pollution

Control Act Amendments and Clean Rivers Restoration Act of 1966, provides practical answers to industry, municipalities, and small towns in the complex and distressing campaign to protect the vital natural resource—water.

Civic leaders throughout the country have known for some time that their communities with nonexistence or inadequate facilities for waste treatment and disposal are contributing to a future catastrophe. However, they did not, in most instances, have the financial resources for the expensive sewage treatment plants. I know how hard it is; I was a mayor, and fully realize the difficulty of convincing the public of the necessity of \$4 or \$5 million for these facilities when so many other community projects are needed, especially in the field of education and transportation.

Unfortunately, a sewer system or a treatment plant is not a facility to which a mayor or city councilman can point with pride. No one really cares as long as it is working.

Frankly, the effect of putting such facilities in is soon forgotten. It is similar to a person who has a toothache, has it taken care of by the dentist, and then the ache is soon forgotten. Once the toothache is taken care of, the toothache and the dentist are soon forgotten. Once a sewer pipe is placed in the ground and

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dirt covers it, one forgets about it until he gets a bill and sees that his taxes have been increased.

If the Congress approves S. 2947, we, the Congress, can say to these civic leaders the Federal Government will provide more help, and we can encourage the States to do their share, because this is a big and an important job.

The \$6 billion authorized by the bill is a great deal of money. It is small, however, when we compare this sum with the estimated cost of reclaiming the Great Lakes—\$20 billion.

S. 2947 provides needed reforms in ex-

isting law by lifting the dollar ceiling on the 30-percent basic Federal grant projects; and by providing a 10-percent bonus, in addition to the basic 30-percent grant, for projects which conform with area wide planning. Provision of the 10-percent bonus encourages planning, but we do not require it for Federal assistance. The problem is too great and the need too present to require the detailed planning in which some Federal agencies are currently embroiled—confusing the local people instead of helping.

The bill provides more assistance for the local people in the form of a revolving fund to help authorities meet the local share of pollution abatement projects. Important, too, is the \$25 million annual grants to promote research, development, and demonstration of new methods of pollution control and water reclamation to give us new ideas in this area of vital concern.

In my testimony before the committee I asked for a higher percentage of Federal participation. However, the clean rivers restoration program, which was added, fills a vital need with its river basin approach. Each river basin planning agency could qualify for 50-percent Federal grant, depending upon its own water quality standards, and a State program of 30-percent participation.

My own State of Indiana has plans to provide for State funds in pollution control projects. The river basin program means that we could make concentrated efforts of pollution control on the Wabash, the Ohio, the St. Joseph and the White Rivers.

The Public Works Committee has done an excellent job in providing the Interior Department, now the central authority for Federal pollution control, with an expanded program. I hope that the Department, in administering the program, will move to coordinate Federal funds available for sewer systems and treatment plants under the jurisdiction of the Housing and Urban Development Department, the Economic Development

Administration, the Farmers Home Administration, and the Interior Department's own central authority.

As another step in the campaign to insure an adequate safe water supply, I hope that we can work out a program to ease the desperate shortage of sanitary engineers. This can be done by shifting existing educational programs and through the research grant funds provided by S. 2947 to educational and other institutions for new pollution abatement methods.

I am pleased that the Senator from Maine [Mr. MUSKIE] has accepted amendments proposed by the Senator from Kentucky [Mr. COOPER] and the Senator from Massachusetts [Mr. KENNEDY], which will help to train personnel in this important field.

Again, now that the Senator from West Virginia [Mr. RANDOLPH] is present in the chamber, I wish to compliment him for the fine work he always does, not only in this field, but in every endeavor he undertakes.

I note that he is wearing a beautifully colored jacket, which is indicative of his youth and his interest in youth. He has an interest in young people and in seeing to it that we will have enough of our natural resources left so that the younger people will be able to enjoy in their lifetime the resources that we in our lifetime were able to enjoy.

I urge Senate approval of S. 2947, significant legislation, of which we, the Members of the 89th Congress can be proud. By approving this bill we will meet the requirements for the future and avert a national crisis.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Wisconsin [Mr. NELSON].

[Putting the question.]

The amendment was rejected.

The PRESIDING OFFICER. The committee amendment is open to further amendment. If there be no further amendment to be proposed, the question is on agreeing to the committee amend-

ment in the nature of a substitute, as amended.

The committee amendment in the nature of a substitute, as amended, was agreed to.

The PRESIDING OFFICER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed for a third reading, and was read the third time.

Mr. COOPER. Mr. President, I know that the Senate is anxious to vote shortly on this bill, and I shall not detain the Senate long. I should like to say, as a member of the Committee on Public Works, that the subcommittee headed by the distinguished Senator from Maine [Mr. MUSKIE], with the able assistance of the ranking Republican member on the committee, the Senator from Delaware [Mr. BOGGS], and the entire committee, has done notable work in developing the bill before us.

This bill follows the Water Quality Act, and is a significant and purposeful proposal to try to meet the problem of water pollution.

It is now becoming more and more a matter of public consciousness that if our water resources are not developed—and more important—conserved our country will by 1980–85 enter a critical period of water supply, a period when clean water will not be sufficient for the needs of our people and expanding industry.

It will be necessary to store water in reservoirs in our river basins to prevent water pollution and to clean water so that it may be reused. This bill moves forward toward these goals.

I have raised a question, which does not question the need and purpose of the bill, but one which I think should be understood by the Senate and by the people. The bill provides a very large authorization, of some \$6 billion over a period of 6 years. The bill does not appropriate any part of the \$6 billion, but enacting the measure, Congress will give to the Appropriations Committee au-

thority to recommend appropriations; and of course to Congress to approve appropriations.

The amount is awesomely large. But if one reads the report that studies indicate that to fully meet the problem of water pollution control, an expenditure of \$100 billion may be required upon the part of local community, State, the Federal Government, and private industry.

This bill, while authorizing \$6 billion, only authorizes grants for municipal sewage treatment. It leaves for future action the separation of storm sewers and ordinary sewers, which may total \$40 billion, and also the treatment, prevention, and abatement of industrial wastes.

We are faced today with the cost of the war in Vietnam, and the attendant problems of inflation, shortages, evidences of control, and wartime and unhappy factors. Because of these, I have voted to hold down authorizations, to eliminate and defer unneeded expenditure, and I shall continue to do so. With respect to this bill, I think it necessary that the Committee on Appropriations, after these authorizations have been provided, take into consideration the cost of the war in Vietnam and will not appropriate large sums, until the burdens of the war in Vietnam are lifted. But in all fairness, it must be said that at some point, today or next week, or next year, this bill must be passed if the vital supply of water is to be preserved for the future life of our Nation.

I do not wish to burden the RECORD unduly, but I recall that yesterday, the Senator from Maine [Mr. MUSKIE], the Senator from Connecticut [Mr. RIBICOFF], the distinguished chairman of our committee, the Senator from West Virginia [Mr. RANDOLPH], the Senator from New York [Mr. JAVITS], and others, spoke of the necessity of moving in another direction to control water pollution—that is, with respect to industrial wastes. This bill deals with the provision of Federal assistance to municipalities, States, and interstate complexes.



Something must be done to give incentives to industry to install the facilities to diminish or eliminate the waste which is a principal cause of water pollution. Many industries are assuming the responsibility. Their expenditures for pollution control facilities do not increase their profits, but are a type of social expenditure.

We should encourage them by some kind of tax incentive. The Senator from West Virginia [Mr. RANDOLPH] and I have introduced a bill which would provide investment credit to industries installing pollution control facilities. The distinguished Senator from Connecticut [Mr. RISICOFF] has pressed for such leg-

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islation for several years, and has a bill which would provide faster tax write-offs.

Because we are now discussing this tremendous problem of water pollution control, to conserve a basic resource, and because the pending bill represents a strong step in that direction as respects municipal sewage, I think it is proper, in this debate, to call attention again to the necessity of moving also in a parallel direction toward the control of industrial sewage. I hope very much that the House Committee on Ways and Means and the Senate Finance Committee will this year take action in that direction, by the recommendation of bills to provide tax incentives to industry.

Mr. MUSKIE. Mr. President, will the Senator yield?

Mr. COOPER. I yield to the Senator from Maine.

Mr. MUSKIE. Mr. President, I am delighted that the distinguished Senator from Kentucky makes reference again to the subject of incentives for industries. I think it highly appropriate, because of his knowledge, and because of the leadership of the Senator from Kentucky and others, that the portion of the committee report dealing with incentives be printed in the RECORD at this point,

and I ask unanimous consent that that be done.

There being no objection, the excerpt from the report (No. 1367) was ordered to be printed in the RECORD, as follows:

#### INCENTIVE ASSISTANCE FOR INDUSTRIES

A number of witnesses testified on the need for tax incentives as a means of reducing the cost of noneconomic pollution control facilities. This is not a matter over which the Senate Public Works Committee has jurisdiction but it affects the overall effort to meet water pollution control and abatement needs. This committee strongly recommends that the appropriate congressional committees give consideration to tax proposals for industrial pollution control activities.

For the most part, pollution control does not provide a return on an investment to an industry. Installation of pollution control devices is costly and, in many cases, nonre-munerative. The billion dollars of capital investment which will have to be made by the industrial sector for the benefit of the entire society will place a substantial burden on corporate resources, and ultimately on the general public. The committee suggests that there are several alternative methods of aiding industry in meeting its pollution control obligations.

Investment tax credits as proposed by Senator JOHN SHERMAN COOPER of Kentucky, in legislation cosponsored by the chairman of the Senate Public Works Committee, Senator JENNINGS RANDOLPH of West Virginia is one method whereby industry could recoup the cost of control and abatement of pollution. Senator ABRAHAM RISICOFF of Connecticut, in legislation cosponsored by, among others, the chairman of the subcommittee, Senator EDMUND S. MUSKIE of Maine, provides for accelerated amortization of the cost of pollution control facilities. This may also provide a means of offsetting industry's cost of pollution control. However, both of these methods do not consider the problem confronting those industries with plants having great pollution problems and marginal economic efficiency.

The committee has recommended greater emphasis on joint municipal-industrial treatment systems operated by public agencies. Such systems are eligible for assistance under the sewage treatment grant program.

The proposal by the American Paper Institute for specific Federal grants to municipalities to construct industrial waste treatment facilities would provide an effective means of meeting the needs of both the marginal industries as well as the profitable industries. Such a Federal grant approach would not be inconsistent with public policy because the grant would, in effect, be made to a unit of government. This approach differs from that

proposed by Senators COOPER and RIBICOFF and is a matter which can and will be considered by this committee. However, realizing that there is no final answer to the problem of financing industrial pollution control, the committee reiterates its strong recommendation that the appropriate committees consider tax relief legislation.

Mr. MUSKIE. I hope that this kind of documentation, which is appealing to the committee, will also make its impression upon the Committee on Finance.

The Senator from Utah [Mr. Moss], whose steady support of effective water pollution control legislation has been of immense help to me and to the other members of the Subcommittee on Air and Water Pollution, recently made a thought provoking speech, "Must We Pay the Piper," at the Summer Institute in Water Resources, Utah State University. I think that it is appropriate that this eloquent statement be presented to my colleagues on the day we enact the major bill designed to improve the quality of our water resources. I ask unanimous consent that Senator Moss' speech be printed in the RECORD at this point.

There being no objection, the speech was ordered to be printed in the RECORD, as follows:

#### MUST WE PAY THE PIPER?

(Speech of Senator FRANK E. MOSS, Democrat, of Utah, at the Summer Institute in Water Resources, Utah State University, Logan, Utah, June 29, 1966)

If ever there was a classic example of carrying coals to Newcastle it is making a water speech at Utah State University. It is like spreading butter on the bacon—gilding the lily—painting vermillion into our Western skies at sunset.

There is no place in the country where there is more expertise on water than in this beautiful green bowl in the Wasatch Mountains. We have collected here in our water research laboratories some of the best brains and equipment in the country. We have added to them at this Summer Water Institute a number of visiting specialists in engineering and earth science.

I don't mind telling you that I feel I am in vast company. Although I have made water my major cause in the United States Senate, and I sit week after week in hearings on water legislation, I approach this assignment tonight with considerable humility.

The water story I am going to tell you in this June of 1966 is much more interesting than the tale I would have told had you invited me here in June of 1960—or even June of 1965. Today's story has a much broader sweep, much deeper implications, is more hopeful, and certainly more dramatic. In fact, the water story today is a cliff hanger.

Will America find ways to meet its growing water shortage?

Will we stop using and misusing and generally wasting our water resources as if there were no tomorrow?

Will we stop polluting our rivers and our lakes, creating health hazards for our people, killing off our fish, and desecrating our recreation areas?

Will we glut the beautiful Ohio with garbage, and smother the mighty Colorado in radio-chemical wastes?

Will we let the Great Lakes die?

Will we awaken some morning to find that we have run out of clean water in some sections of our country, and out of water of any kind in others?

Tune in, my friends, in 1980 and find out.

Find out whether the people in the most civilized and sensitive Nation in the world were sufficiently awakened in the sixties to do the things which must be done in the seventies to prevent the country from going through its water ceiling in the eighties.

Find out whether we made enough progress in discovering and employing revolutionary techniques in water resource development and conservation to forestall our faucets from running dry, our crops from turning brown, and the wheels of our industry from slowing down and stopping.

Learn whether we kept our water sources clean, our water wastage down, our water re-use cycle high—whether we found out how to control "water hogs," how to bridle unreasonable water use, how to impose disciplinary measures to control waste—whether we discovered how to desalt water cheaply and how to make rain fall where we want it—and, finally, whether we learned how to put to beneficial use every drop of water anywhere through interbasin and international water transfer, through recharging of aquifers, and through multiple-use projects to increase supplies and municipal and irrigation water, to improve navigation, to control floods, to provide more power, to create new recreational areas and to protect our wildlife.

I predict that America will win this water fight. I say we will win it because of research centers such as Utah State University and summer institutes such as this one which fully diagnose and prescribe for all phases of our ailing resource, and from which knowledge flows out in many directions to be absorbed and used.

I say we will win because both the private sector and Government, from the county level up, are beginning to realize the immensity of our water problems and are moving to conquer them.

And, finally, I say we will win because the people themselves are awakening to the perils of our water pollution and the vulnerability of our water supply and they are beginning to insist that more be done, and to support financially the doing of it.

The breakthrough to the man on the street is the crucial one. For years, as this audience well knows, water has been discussed back and forth in the jargon of water experts, resource engineers and highly educated technicians, but today the pollution of our waters and the ebbing of our supplies is a growing subject for discussion in editorial columns, in magazine articles, in television specials, in civic clubs and over backyard barbecue pits.

Many forces have converged at this date and time in history to make water of such commanding interest. I like to think that the first impetus came from the report made in January, 1961, by the Senate Select Committee on Natural Water Resources, on which I served. This committee inventoried our water resources and projected our requirements through 1980; it supplied us with the hard facts on our water demand as balanced against our water supply.

But it took a whim of nature to really dramatize our water crisis—to make water breakfast-table conversation, a shift in wind patterns, causing rain to fall over the ocean rather than upon the coastal areas, greatly cut, for several years in a row, the normal amount of precipitation in a wide swath of country stretching from New Hampshire to West Virginia. This is an area of our densest

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population and our heaviest concentration of industry.

Now, we in the West know all too well what it is to have our cities and towns thirsty, and our fields dusty and dry. There has never been enough water here in Utah since the day Brigham Young led the pioneers down emigration canyon into the Salt Lake Valley. We have had to develop every source of water we could find, and to put every drop to beneficial use after we found it.

But the people of the large cities and towns of the East and Northeast seemingly have always had a bountiful supply of water—and they serenely assumed that they always would. Then they discovered that they, too, could be short of water—that it could happen to them.

In August 1965, the chief engineer of the city of New York warned the Delaware River Basin Commission that the largest city in

the Nation could "run out of water by the middle of February." The President declared the Delaware Basin and New York a disaster area, and a drastic water saving program went into effect.

Well, as you all know, the East and Northeast did not run out of water. It did skimp through. But the interest of the people and their officials, and their newspapers, and their civic clubs was aroused as it never could have been aroused by a Senate national water resources committee report. A whole new and important area of the country became receptive to the water story.

As much as I regret the inconvenience and hardship the great drought of 1965 caused the people who suffered through it, it did serve to turn the national spotlight on water—and our water problems. Thus, it was a long-range plus for America.

Now, what is the water outlook in the years ahead in concrete terms? The statistics and facts compiled by the Senate Water Committee are still our bible on this.

If we in America are to sustain our expanding population and rising standard of living, we will have to double our useable water by 1980 and triple it by the year 2000. While we are using an average of 280 million gallons of water each day now for irrigation, industry and homes, we will be using daily about 600 million gallons in 1980 and a billion gallons a day in the year 2000.

We found out further that the 600 million gallons of water a day is getting close to the ceiling of the total supply of good quality water which our engineers have told us could be made available, as a practical matter, with present engineering knowledge and techniques.

We learned that in five of the Nation's twenty-two resource regions we stand on the edge of water disaster—we could well be out of water in any of them by 1980. Two of these water-short basins are the Colorado River Basin and the Great Basin. Utah stands astride of these two.

In most of the other water basins, where rainfall is generally adequate, the water has been so misused that pollution is rampant. In fact, almost every American river of any consequence is infested with water pollution from one source or another. Ten times as much municipal waste is being poured into our waters today as in 1900. Industrial waste has increased threefold from chemical plants, paper mills, tanneries, dye works, and municipal sewage.

The historic Merrimac, is filled with noxious wastes. Refuse from steel mills pour red rust into the Cuyahoga. Petro-chemical wastes from a huge oil company complex pollute the Ottawa; mine salts and chlorides contaminate the Grand River. The Arkansas is contaminated by mine, metal, processing, packing, and agricultural runoff wastes. The

Columbia's pollution from paper mills poses more threat to the salmon than the river's dams. Canning wastes pollute the San Joaquin and the Sacramento in California. Oil refinery wastes taint the lower reaches of Yellowstone. Only last month we began in the Senate Public Works Committee to check into radio active wastes in the Colorado—and I do not need to mention to this audience the pollution problems of the Bear.

It will take \$75 billion, spent over two or three decades, to clean up America's rivers.

Nor have our lakes been spared from pollution. The Great Lakes are a tragic example. Industry and communities around the lakes have used their waters for years as a dumping ground for municipal and industrial wastes. Pollution has been aggravated recently by the water shortage. Several of the Great Lakes are dying bodies of water. Erie, the northern border for much of industrial America, is the sickest. About one-fourth of Lake Erie is all but dead today. The huge expanse contains almost no oxygen, no fish swim about, and the surface and beaches are infested with scum.

We learned also from the water committee studies that we are proceeding far too slowly in harnessing and developing our rivers through multiple-purpose projects—that we must make the seventies the decade of advanced dam construction, just as we have made the sixties the decade of advanced highway construction.

We found that we have only begun to use our knowledge about depletion of water supplies through control of strip mining, timber removal, overgrazing and fire, and that we have a great deal more to learn about the mining of ground water and the recharging of aquifers.

We learned that we must step up activities in the field of water variability, which includes both floods and low water flow.

And finally, we discovered that we have only started to work on the great problem of water waste—on the ways in which water is being used inefficiently, on "water stealing" vegetation, on evaporation, and on allowing water to run off to the sea unharnessed and unused.

We found consistently that we had lagged on research in all of these fields—that a constant expansion of knowledge and technical capability in the water field is absolutely indispensable.

The Senate Water Committee estimated that the nation should invest a total of \$228 billion in the period between 1958 (when the figures were gathered) and 1980 for all types of water resource facilities if we are to assure enough water to sustain our galloping population and our zooming standard of living. Since we have spent about \$180 billion so far in our nation's history on water resource facilities—this means that we

need to spend *more* in a twenty-year period than we have spent in almost two hundred years.

This alarming report unbuttoned a surge of both discussion and action in the water field. I think it is safe to say that the Congress has passed more constructive water legislation in the past five years than at any other time in history.

Congress established a water pollution control administration which will conduct and oversee a broad public and industrial pollution control program, and we greatly increased the federal funds available to communities for the construction of waste treatment and other pollution control facilities.

Congress launched a water research program which will invest nearly \$100 million a year for ten years on basic water research. This is over and above the massive research program to bring desalting of water into economic balance both in North America and elsewhere in the world.

Congress enacted the Water Resources Planning Act, a landmark bill which places water resources planning on a river basin basis, and gives money to the states for planning. This bill recognized the fundamental fact that water does not stop at state or county or municipal boundaries, and that any planning which does not take this into consideration will be piecemeal planning—with piecemeal effect.

Congress passed a measure which established guidelines on what percentage of funds going into multiple-purpose water projects may be charged to recreation programs. This will equalize these costs between army engineer and reclamation projects.

We accelerated our efforts to authorize multiple purpose projects which would serve not primarily an agricultural society, but an industrialized society with mounting payrolls and increased leisure time.

All of this—and more—in five short years!

We have before us in this session of Congress legislation which will coordinate attacks on water pollution within each river basin. To make this program more effective we recently transferred the water pollution control administration from the department of Health, Education and Welfare to the Department of Interior, where other river basin planning is centered.

We have just passed in the Senate a bill which would establish a national water commission—an independent body of nongovernmental experts—to make an independent evaluation of policy questions in the water field. We will call on these distinguished citizens, outside the government, to consider all aspects of our incredibly complex and interrelated water problems, and to suggest remedies and solutions.

More imaginative solutions and better,

bolder, planning is a mandate for America if we are to have enough water in the future. Water itself is an almost indestructible commodity, as you all know. To all practical purposes, the seas, rivers, ground, lakes, swamps and atmosphere of the earth hold as much water as they did when they were created. We are in trouble today simply because our civilization calls for the use of more water than any other civilization in history, and we are not only using this water, but flagrantly misusing it.

It is my opinion, however, that even if the United States does replace our hodge-podge of poorly coordinated water programs with a modern management system we may not be able to assure to our children and our grandchildren enough water to meet the needs of their way of living. Particularly will this be true if our children and grandchildren continue our present movement to the sun-drenched southwest quadrant of the United States where drought is almost perpetual.

We will have to find some way of redistributing water from river basins where water is surplus, to river basins where there is not enough to go around.

I feel that the best answer, not only for us who live in water short areas but for central and eastern America, is the North American Water and Power Alliance which proposes a continent-wide system to redistribute water from Alaska and the Canadian Northwest. It would transport huge supplies of water which now run unused into the Arctic Ocean to sections of Canada, the United States and Mexico which do not now have enough water within their own water basins. The Rocky Mountain area, and Utah, with its rich-but-dry-soil, would be among the areas to profit most greatly from this plan.

The NAWAPA concept—and I call it a concept because it is only that now—has been proposed by the Ralph M. Parsons Company, an architect-engineering firm of Los Angeles. It received little attention however, until a special subcommittee of the Senate Public Works Committee, of which I was named chairman, undertook to analyze it and to compare it with an inventory of all water resource development projects anticipated

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for the next twenty years by principal Federal agencies.

It was the subcommittee's conclusion on the basis of a very general study that the Parson's concept, which is estimated to cost up to \$100 billion and to take 30 years to build, would produce nearly twice as much water as the total of our other proposals for water projects for about one-fourth additional cost.

NAWAPA is a bold project which staggers

the imagination. It is also most controversial. Some of our Canadian neighbors have strong reservations about exporting *any* of their water, others say, let's look at our need first to see if we have surplus, then see what we can get in return. The concept is only in the talking stage now but I predict you will be hearing a great deal more about NAWAPA in the future.

NAWAPA is one progressive step we must take. There are others of equal sophistication. One of these is reorganization of our Federal water resource management. It is now far too diffused to enable us to stretch our water supply as creatively and ingeniously as possible.

For example, we have five Federal Departments—Interior, Agriculture, Health, Education, and Welfare, Defense, and Housing and Urban Development—and two powerful independent agencies—the Federal Power Commission, and the Tennessee Valley Authority—and twenty-five subordinate agencies all with statutory responsibilities on water resources. It is very difficult to coordinate a program which is spread-eagled like this.

It is also most frustrating for an outside agency trying to work with the Federal Government with such a patchwork of authority. The Delaware River Commission, for example, must harmonize the work of nineteen Federal agencies, fourteen inter-state agencies and 43 State agencies. How the Commission move ahead with its work at all is a modern miracle.

Duplication is not the only caprice of our water management. Different agencies have conflicting programs. The Department of the Interior entreats North Dakota farmers to preserve wildlife while Agriculture pays them to drain the pot holes which sustain migratory birds.

The Park Service is trying to save the everglades in Florida while the Corps of Engineers drains them. The Federal Power Commission authorizes a fun-of-the-river dam on a stretch of rushing water where the Corps of Engineers or the Bureau of Reclamation have under consideration multiple-purpose development.

There is little sound argument that coordination of our water resource programs is not desirable; many people simply feel that it is not possible. I do not agree. With water front and center in our national life, I believe that it is possible to do now what we have not been able to do in fifty years. To this end I have introduced legislation to convert the Department of the Interior into a full-fledged department of natural resources, bringing under it the diverse water activities of the Federal Government, and transferring out of it functions which can be done better by other departments.

Sparks have been flying ever since the bill

went into the hopper. Bureaucrats don't want to be transferred, private interest groups don't want the agency which handles their pet projects changed in any way, powerful lobbies see loss of prestige and loss of control in any shift in authority.

If this is possible, my bill to establish a Department of Natural Resources is even more controversial than Nawapa. In fact, there are times when I read my morning mail that I believe I am sponsoring the two most controversial bills before the Congress.

But I feel that both of my proposals must eventually be adopted, and I intend to persevere on them.

My friends, man's inability to control water supplies caused ancient civilizations to crumble. We need not suffer the same fate. We are not less dependent upon water than we were a thousand years ago, but we know far more about our environment. We will learn more in the years ahead through creative research and the resolute application of the results.

We need not run out of water. We need not pay the piper.

If we can maintain our present momentum, I believe America can skimp through. We are far behind now in what must be done. But the public consciousness has been awakened—the people know that the days of writing blank checks on our water are gone.

It will not be easy to keep interest in our water problems high. The water picture can shift with the shift of a breeze. For example, the drought in the Northeast appears to be easing. Rainfall, so far this year, has been nearer normal, although it is too early to predict that the abnormally dry weather which has plagued this region since 1961 is over. But if it is—well, memories are short when the tap runs fast again, and the swimming pool is full, and the lawns are green.

Again some of the impetus that comes with sights and smells which cannot be borne dies down as polluted water becomes safe for drinking, as picnic beaches are opened, as rivers can be fished, and as wildlife has a new lease on life. If, and as, these days of wine and roses return we may lose some of our concern about water. America is a big country. It is hard to catch and hold attention on a problem which does not immediately—this morning—affect a person, or a community, or an area.

This apathy is something those of us who have made water a major occupation must be "suited up" to meet. For you and I know there is no choice on water. We know that we now have millions more people than we had when America was settled, and that we are compounding humanity at an unbelievable rate. Yet we have only the same amount of water on which we can count.

We know we have only begun the work which we must conclude by the 1980's—we

have only glimpsed the far shores we must reach by the year 2,000.

Whether we make those shores—whether we get off that cliff on which we are now hanging so precariously as the water serial continues in reel after reel through the rest of the sixties and on through the seventies and into the eighties—depends on how well we plan now, and how courageously and surely we carry through those plans.

I predict that we will win the water battle. What do you experts say?

Mr. MUSKIE. One other point I should like to make, in response to the Senator's concern with the problem of incentives to industry, is that the bill is not entirely devoid of reference and application to the industrial waste problem. There is a provision in the bill for grants to demonstrate the feasibility of combined municipal-industrial waste treatment works. Municipal treatment works which treat industrial effluent, of course, would be eligible for assistance under the grants provisions of the pending bill. Smaller industries are interested in this. Combined facilities are being used to some extent, and when they are, they are of assistance to the industries involved.

The pending bill would undertake to stimulate expansion of this approach to include the industrial waste problem.

Mr. COOPER. I am aware of these provisions. I see the distinguished Senator from Connecticut [Mr. RIBICOFF] on the floor; I do not know whether he wishes to address himself to this matter but I hope that he will. I should just like to say, in closing, that I believe that this bill focuses the attention of the country upon the necessity of conserving the basic resources of water. It may eventually cost \$100 billion, between the States, the municipalities, the Federal Government, and private industry, but we must make a start.

Mr. RIBICOFF. Mr. President, will the Senator yield?

Mr. COOPER. I yield to the Senator from Connecticut.

Mr. RIBICOFF. I am glad that the Senator has again brought up the question of pollution by industrial wastes.

We had a colloquy yesterday on the same subject.

I was interested to read this morning, in the New York Times, that Secretary of the Interior Udall, in testifying before a committee of the House of Representatives, mentioned that he felt the time had come when there should be some tax incentive program to help solve the problem of pollution. He recognized that he was not speaking completely for the administration, but personally, because of the conflict and the opposition of the Treasury.

Since our colloquy yesterday, I have done some additional research to determine whether there are other areas in related fields where economic incentives are given.

I was interested in finding the following sections of the Internal Revenue Code:

Section 174 permits research and experimental expenditures to be deducted currently. However, these expenditures do not include amounts paid for the acquisition or improvement of land or depreciable property.

Section 175 permits soil and water conservation expenditures and expenditures for the prevention of erosion of land used in farming to be deducted currently. However, the total deduction cannot exceed 25 percent of the gross income derived from farming. These expenditures are not deductible if they are incurred to purchase, construct, or improve structures or facilities which are depreciable.

Section 180 permits capital expenditures paid by farmers to be deducted currently where they are incurred to purchase or acquire fertilizer, lime, ground limestone, marl or other materials to enrich, fertilize, or condition land used in farming.

Section 182 permits capital expenditures for the clearing of farmland to be deducted currently. However, the amount deductible for any one year cannot exceed the lesser of, first, \$5,000 or second, 25 percent of taxable income

derived from farming, and such expenditures do not include those for the purchase, construction, or improvement of structures or facilities which are depreciable.

Section 615 permits exploration expenditures paid for ascertaining the  
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existence of any deposit of ore or other mineral to be deducted currently to the extent that they do not exceed \$100,000 in any taxable year with an overall limit of \$400,000. However, expenditures for the acquisition of depreciable property do not qualify.

Section 616 permits development expenditures incurred for the development of a mine or other natural deposit—other than an oil or gas well—to be deducted currently but the section does not apply to the acquisition of depreciable property.

So, we see that there is precedent in the Internal Revenue Code for a faster than ordinary depreciation allowance which would be normally over a period of 20 years.

The Senator from Kentucky [Mr. COOPER], the Senator from West Virginia [Mr. RANDOLPH], the Senator from Kansas [Mr. PEARSON], and I have discussed the matter many times. We must recognize the fact that if we are ever to solve the problem of pollution, we must look for complete cooperation from American industry.

Yesterday we authorized many millions of dollars for Government expenditure in air pollution control. Today we are considering a \$6 billion bill for water pollution control. We all vote for the measure enthusiastically because we recognize the need for it. However, I think we are far from realistic when we are fearful of expending some additional \$50 million to \$150 million a year in fast tax writeoff incentives to encourage American industry to play a major role.

We must recognize that, unless we have the cooperation of American industry, we will not clean the streams

or waterways of America. We will not be able to cleanse the air of America of pollutants.

It is only commonsense for us to recognize that the Government needs co-operation from American industry. The way in which we can achieve this co-operation with American industry is to grant fast tax writeoff incentives.

When we first introduced the bill that the Senate passed 2 years ago, the bill provided for a deduction of a tax credit or a fast tax writeoff in the first year. There was a demurrer on the part of the Treasury Department that this would cost too much money. The Treasury Department estimated that in the first year it would cost anywhere from \$200 million to \$500 million.

I recognized the fact that we were in stringent circumstances financially. I redrew the bill, to allow the depreciation deduction spread over 3 years. This would cost, instead of \$200 million to \$500 million, from \$50 million to \$150 million.

The formula can be changed depending on how far Congress wants to go in taking account of budgetary considerations. Once we determine what we want to deduct from our total revenue income, we can then work out the formula in any bill that is proposed. However, since we, as a Congress, are taking these huge steps toward water and air pollution control and authorizing such large sums of money, we ought to do the job by authorizing the deduction of a relatively small amount of money to clean up the streams and the air of America.

This can be done. I am not hopeful that the administration will come around to our way of thinking. I am convinced that the overwhelming sentiment in the Senate is that we give industry these tax incentives.

I believe that the Senate would vote overwhelmingly for such a program. Consequently, it is my feeling that we should not wait for the administration to take the lead. It is my feeling that we

should take the lead and do the job, irrespective of the wishes of the administration. Therefore, before the session closes, and whenever an appropriate bill is reported by the Committee on Finance, it is my intention to offer from the floor of the Senate an amendment to achieve what the Senator from Kentucky [Mr. COOPER] and the Senator from West Virginia [Mr. RANDOLPH] have been talking about, and what I have been discussing and what the Senator from Kansas [Mr. PEARSON] has been discussing.

I feel certain that we who are interested in this approach and have introduced various bills will be able to get together and agree upon what we believe should be a fair amount, taking into account the financial circumstances of the Nation at this time. At that time, I am sure, we can all agree upon, and all of us can join in cosponsoring, a measure that can be offered as an amendment to a bill reported by the Committee on Finance. I hope that at that time I might have the enthusiastic support of the distinguished Senator from Kentucky, the distinguished Senator from West Virginia, and the distinguished Senator from Kansas. We might have to fight the administration; we might have to fight the joint leadership; but I think there are times when that must be done in order to achieve desired results.

Mr. COTTON. Mr. President, will the Senator from Connecticut yield?

Mr. RIBICOFF. I am pleased to yield to the distinguished Senator from New Hampshire.

Mr. COTTON. I should like to associate myself with the Senator's remarks on this subject and on this point. It occurs to me, that to start to maintain a water pollution control program without providing some incentive to industry is exactly like building a bridge three-fourths of the way across a river, and then not adding the last span to reach the other shore.

The attitude of the senior Senator



from New Hampshire is not colored in any way by the fact that the administration does not favor this step at the present time. During the administration of President Eisenhower, the Senator from New Hampshire was prepared, and on the floor of the Senate stated that he was prepared, to vote to override the President's veto of a water pollution control bill at that time. However, the House sustained the veto first, and the Senate never had an opportunity to vote. But most certainly the Senator from New Hampshire joins the distinguished Senator from Connecticut in supporting his tax incentive plan in some reasonable form.

Mr. RIBICOFF. I believe that together we can determine the reasonableness, because it is easy to calculate the relative costs of a tax deduction program or incentive program, depending on what the program will be.

Since the bill was introduced, I have found a lively, active interest on the part of various industries in America, industries that are the basic cause of pollution. There is a recognition by industry today, unlike their attitude a decade ago, that they do have a responsibility. They now have an active desire to eliminate pollution. Certain States have done it, and have done it well.

The distinguished junior Senator from Wisconsin [Mr. NELSON], who is standing in the aisle, as Governor of his State led the fight for tax incentives and tax credits, and for State taxing programs for the placing of pollution devices in Wisconsin.

Other States have followed the lead of Wisconsin. My own State of Connecticut recently followed this lead.

But State taxes are relatively small. The basic expenditures and the basic tax bite are by the Federal Government. So I firmly believe that once a tax incentive program were placed in effect, we would find an amazing acceleration on the part of all American industry—the coal industry, the oil industry, the steel industry, the mining industry—all of whom

recognize their obligations, but find themselves in a fantastic bind with respect to expensive expenditures, and having to write them off over a period of 20 years.

It is economically unsound. But in this way they would be given the fast tax writeoffs. While the Treasury might suffer the loss in the first year or the first 3 years, it would pick it up later on. The deductions take 20 years, anyway, and the Federal Government would be able to recoup its immediate loss of tax revenues, because the continued deduction would not take place in the next 17 years.

It is a question of being practical; and since we are passing this landmark bill today for \$6 billion, I believe it is very shortsighted not to implement it with a program that might cost anywhere from \$50 million to \$150 million.

Mr. COOPER. I am pleased with the statement that the distinguished Senator from Connecticut has made.

For 3 years now, the Senator from Connecticut has been leading in the fight for legislation to secure these incentives to obtain the full cooperation of industry in this great task. I agree with the Senator from Connecticut that the Senate will pass such legislation. I hope that he will use his influence with the administration to support such legislation.

Mr. President, on April 6 I spoke on the Senate floor concerning the public hearings scheduled by the Subcommittee on Air and Water Pollution on the bill before us today and pointed out that I hoped that industry representatives in discussing various methods for controlling and abating pollution would also include a discussion of their views on

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the use of tax incentives as a method of accomplishing this purpose. I am happy to note that their testimony has been helpful to the committee in its strong recommendation for congressional consideration of proposals offering industry some form of tax relief.

Mr. President, I ask unanimous consent that my statement of April 6 be included in the RECORD at this point.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

FEDERAL TAX PROPOSALS FOR CONTROL OF AIR AND WATER POLLUTION

Mr. COOPER. Mr. President, I cannot predict which method the Congress may prefer in providing industry with some assistance in establishing pollution controls: that is, investment credit, accelerated depreciation, a combination of these two methods, or some other method. But I do believe that some form of incentive should be provided private industry and I urge the Finance Committee to give this matter their close consideration and I am hopeful that hearings may be held on these proposals in the near future.

I would also like to bring to the attention of the Senate that the Subcommittee on Air and Water Pollution of the Committee on Public Works has announced a 10-day hearing schedule on water pollution commencing April 19 and continuing through to May 5. I note that among the industry representatives scheduled to appear are the following:

National Association of Manufacturers, U.S. Chamber of Commerce, Manufacturing Chemists, the soap, and detergent industry, the iron, and steel industry, and the paper industry. I would hope that these industry representatives in discussing various methods for controlling and abating pollution would also include a discussion of their views on the use of tax incentives as a method of accomplishing this purpose.

In this connection, Mr. C. H. Gebhardt, manager of the tax department of the Mead Corp., has prepared a useful chart analyzing current tax proposals relative to water and air pollution controls so as to determine the measure of financial assistance that would actually be given to business if a particular proposal should be adopted. For each \$100 outlay for pollution control facilities, Mr. Gebhardt concludes that the bill I introduced with Senator RANDOLPH would provide an incentive equal to 6.7 percent of the cost of pollution control facilities. Other methods provide for incentives of 1.1 percent, 6.1 percent, 7.8 percent, and 14.5 percent of the cost of these facilities. I ask unanimous consent that this table be included in the RECORD.

There being no objection, the table was ordered to be printed in the RECORD, as follows:

**"COMPARISON OF VARIOUS APPROACHES TO WATER AND AIR POLLUTION CONTROL INCENTIVES VIA CHANGES IN THE FEDERAL INCOME TAX LAW (USING A \$100 OUTLAY FOR POLLUTION CONTROL FACILITIES AS AN EXAMPLE)"**

	Existing tax treatment (for comparison purposes)	Alternative approaches to incentives					1-year writeoff and investment credit <sup>2</sup>
		1-year writeoff and investment credit	14-percent investment credit	7-percent investment credit	3-year writeoff and investment credit	Existing 14-percent investment credit	
Cost of facility	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Tax benefits:							
48 percent (present top rate on corporation) 7-percent investment credit <sup>3</sup>	48.00	48.00	48.00	48.00	48.00	48.00	48.00
Additional 7-percent investment credit proposed <sup>3</sup>	7.00	7.00	7.00	7.00	7.00	7.00	None
Total tax benefits	55.00	55.00	55.00	55.00	55.00	55.00	48.00
(a) Net cost of facility before considering the time value of money	45.00	45.00	45.00	45.00	45.00	45.00	52.00
(b) Net cost of facility considering the time value of money <sup>4</sup>	54.90	47.10	40.40	48.80	48.20	48.20	53.80
(c) Advantage of each alternative compared to existing tax treatment		7.80	14.50	6.10	6.70	6.70	1.10
(d) Amount of incentive as a percent of the cost of the facility <sup>5</sup>		7.8	14.5	6.1	6.7	6.7	1.1

<sup>1</sup> Depreciation writeoff over 16 years using 1 of the accelerated methods permitted for tax purposes (sum-of-years-digits) has been used.

<sup>2</sup> A 1-year writeoff with no investment credit is shown only for comparative purposes. It illustrates the importance of full investment credit; otherwise a quick write-off, whether in 1, 3, or 5 years is ineffective if this results in a loss of the investment credit.

<sup>3</sup> Investment credit has been applied to the total outlay although under present law it applies only to equipment; not to land and buildings. It is hoped that any incentive legislation would extend the credit to all outlays, if it is to be an effective, even though modest, incentive.

<sup>4</sup> It is obvious from line (a) above that there is no difference in net cost of a facility, after tax benefits, under the various alternatives other than for those which obviously allow an additional 7-percent investment credit. The timing of a company's recovery

of tax benefits is most important, however, and this is reflected in lines (b), (c), and (d) where the dollars involved have all been stated in terms of present worth (i.e., their value today). (A 4-percent after-tax discount rate, with tax benefits realized commencing 1 year after the date of investment is the technique used.)

<sup>5</sup> These incentives should be compared with the 30-percent Federal grants available (with certain qualifications) to municipalities for construction facilities. There have also been a number of recommendations to increase such grants as the full environmental improvement program is implemented. Note that in appropriate situations industrial plants will (and do) utilize such public facilities, thus deriving some benefit from Federal grants. The incentives outlined above would serve, in some degree, to treat equitably those industrial plants which for technical and other reasons must install and pay for their own facilities."

Mr. COOPER. Mr. President, in the January issue of the monthly letter published by the Morgan Guaranty Trust Co., of New York, there is an interesting article on this subject entitled "Progress and Pollution—Can the Link Be Broken." In the body of that article the question of private industry purchasing equipment to control air and water pollution receives the following comment:

"If businesses and communities are to be expected to install control equipment on a massive scale to abate air and water pollution, more thought will have to be given to methods of inducing them to make the necessary investment. It needs to be frankly recognized that there is little motive in most cases for the individual business unit to assume unusual costs in order to reduce or prevent pollution, particularly if competitors aren't doing so. Control equipment is nonproductive so far as yielding any marketable product is concerned. In a competitive industry, it may represent the marginal item of cost that prices a company out of some market. Recognizing this, a community eager to attract new plants may be tempted to relax in enforcing pollution regulations."

Mr. President, I ask unanimous consent to have this article printed in the RECORD at the conclusion of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

"[From the Morgan Guaranty Survey, January 1966]

**"PROGRESS AND POLLUTION—CAN THE LINK BE BROKEN?"**

"The problem of pollution is currently being elevated to prominent national attention in much the same way as was the problem of poverty 2 years ago. Almost everyone, or so it seems, is suddenly talking about it, and scarcely a week goes by without an official at some level of government announcing a new initiative to curtail the flow of wastes into the country's atmosphere and waterways.

"Pollution, of course, is not a new thing in the United States, any more than is poverty; nor indeed are efforts at control. American municipalities have made heavy expenditures over the decades to eradicate or prevent water pollution, and some also have invested considerable sums in recent years to cleanse their skies. Similarly, many business firms have made significant outlays to abate the waste flow that is the inevitable accompaniment of industrial activity.

"Realization has emerged, however, that sizable though these efforts have been in total, they simply have not been adequate to keep up with the ever larger waste loads that growing cities, suburbs, and industries are discharging. Sight and smell alone have

been sufficient to drive home this fact. Hundreds of bodies of water in the country are patently unfit for drinking, wildlife, or use in manufacturing processes, and the air in many communities often is laden with floating grime and offensive smells.

"Aroused by such conditions, the public appears primed to support vastly enlarged abatement endeavors. Concrete evidence of this came in New York State in last November's election, when voters gave approval to a \$1 billion bond proposal for financing a clean-up of polluted waterways. The dramatic 4-to-1 vote far exceeded expectations and was rendered especially significant because the borrowing was the largest ever approved in the State's history.

"Since the public mood seems similar elsewhere, what happened in New York may well herald the beginning of a major new turn all across the country in the allocation and use of public funds. The ultimate cost of stepped-up pollution control programs defies meaningful estimate, but it is certain that many billions of dollars will be involved. Economic costs rivaling those for space exploration, for instance, are easy to visualize.

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Underscoring this possibility is the fact that Federal participation in abatement endeavors is rapidly accelerating. Congress last year passed legislation that will require many States to quicken and enlarge antipollution efforts relating to interstate waters. It also provided for national standards limiting emission of automobile exhausts. Acting in accord with this law, the Secretary of Health, Education, and Welfare has just set machinery in motion which will make such standards applicable to 1968 model automobiles and which will add an estimated \$400 million to consumer spending on new automobiles that year assuming sales of 9 million cars.

"Basic to rational regulation of pollution is the question: How clean should water and air be? The answer isn't necessarily the one that most people presumably would give instinctively; namely, that both water and air should be as clean as possible. With regard to water, certainly, an attempt to achieve pristine purity in all instances regardless of intended end use would entail unnecessarily burdensome social costs. Water which is to be used for soil irrigation, for instance, obviously does not have to be purified to drinkable standards. This applies as well to much of the water that is used industrially. Significantly, agricultural and industrial uses account for roughly 90 percent of the country's total water consumption, and feeder systems for these uses often are separate from those running to the country's homes

"Even if a particular stream serves as a source of drinking water, it doesn't necessarily follow that all pollutants must be prevented from entering it. Water taken from a stream, no matter how clean it may seem to be, often must undergo some purification treatment immediately before being routed to household taps. While flowing in the stream, moreover, water has a natural capacity to decompose and dilute many contaminants, thereby cleansing itself. Where there is assurance that this process will be adequate, it would be economic folly to undertake the expense of intercepting and filtering out all waste matter.

"But while water doesn't have to be maintained in all instances at a standard of absolute purity, it is clear that the country's expanding water needs demand that water quality in many rivers, streams, and lakes be raised above the levels that presently prevail. With the advance of technology and the wide application of fertilizers and pesticides, waters have been receiving heavy loads of inorganic and synthetic organic chemicals that do not respond to the normal process of decomposition and cleansing by bacteria and oxygen. In numerous other cases water bodies that could assimilate substantial quantities of organic wastes have been so overloaded with pollutants as to arrest the normal breaking-down process. This has occurred principally because the volume of organic wastes has been expanding rapidly with economic and population growth, while the quantity of rainfall and its subsequent flow through waterways remain relatively unchanged from year to year.

"The constancy of nature's precipitation bounty is the chief hurdle confronting officials who must plan for the country's future water needs. Projections of water demand point to the very real possibility that the supply that can be captured from rainfall runoff could prove seriously deficient within the next decade and a half. It is inescapable, therefore, that some way must eventually be found either to supplement or short-circuit nature's evaporation and precipitation cycle. The desalting of sea water is one possibility, although as a practical matter this as of now seems to have serious limitations both economically and geographically. A more promising possibility is that ways will be perfected to use fresh water more than once during the flow from watershed to estuary, as is already being done to some extent.

#### "UPGRADING WATER QUALITY

"To permit reuse, of course, water must be of suitable quality and this is why accelerated pollution control efforts are so important. The setting of quality standards thus becomes the first task in any coherent abatement program.

"More than half the States have taken at

least some action along these lines. New York State, for example, has classified all of its 70,000 miles of streams and 3½ million acres of lakes as to proposed use. The classifications, which reflect to some degree the concept of stream specialization, are: A for drinking, B for bathing, C for fishing, D for drainage. Besides this classification program, sanitary engineers in the State have evaluated the sewage facilities that would be required in every community in order to raise water quality to the prescribed classification levels.

"While the State has only limited authority to force municipalities to construct such facilities, it has devised a program of financial aid that seems sufficiently generous to assure a good response. Whereas local governments have previously had to carry pretty much the full burden of construction costs for sewers and sewage treatment plants, their share would be only 40 percent under the new approach. New York State will finance the other 60 percent, using the proceeds of the \$1-billion bond issue approved last November.

"Eventually Albany hopes to get Washington to go halves on the 60 percent, but that will have to await congressional action. The Federal Government now gives some assistance to municipalities, but a formula limiting the size of individual grants works to the disadvantage of communities undertaking large-scale projects. The most that can be granted under present Federal law for a single project is \$12 million, a relatively small sum in comparison with the typical undertaking in major cities.

"Governor Rockefeller has campaigned actively for liberalization of Washington's financial aid to permit Federal payment of a full 30 percent of the cost of municipal sewage facilities. He also has proposed that the Federal Government should follow New York State's lead in providing industry with treatment incentives in the form of 1-year write-off against income taxes on investment in pollution control equipment.

"Hopefully the bold initiatives taken in New York will be emulated in other States. If they are not, the alternative is virtually certain to be a national cleanup directed from Washington. The Water Quality Act of 1965 specifically empowered the Secretary of Health, Education, and Welfare to enunciate standards of quality on interstate waters unless the States themselves do so to Washington's satisfaction by June 30, 1967. Should the Secretary do this, the results could be unfortunate. 'And attempt to "standardize" water quality on a nationwide basis,' as Governor Bellmon of Oklahoma recently cautioned, 'would likely disregard regional differences in water quantity, flow, location, natural characteristics, and usage.'

#### "EXHAUSTIVE CONTROLS"

"A disregard of regional differences is already evident in Federal action dealing with air pollution. The action just taken by Washington to require automotive exhaust controls on 1968 model cars applies unvaryingly to every State and every community in the Nation, making no allowance for differences in population concentration or in meteorological conditions. This inevitably means that some people are going to be making outlays of up to \$50 on control devices that will bring no meaningful benefit either to themselves or their neighbors. This could be so, for example, for many residents of Maine—an irony since it is Senator MUSKIE of that State whose name is most closely associated with the enabling legislation.

"There are vast expanses of the continental United States where relatively sparse population or brisk air circulation, or a combination of the two, forestalls the formation of automotive smog. Either the wind blows the pollutants away, or temperature changes cause cold air to fall and force warm air, with its load of pollutants, into the higher atmosphere.

"The self-cleansing action of air is likely to be less effective, of course, in areas where population is heavily concentrated or where the topography is such as to produce frequent temperature inversion. As the term implies, this is the opposite of normal weather patterns. A layer of warm air moves in on top of cooler air, forming a blanket that prevents polluted air from rising and diluting itself in the higher atmosphere.

"In Los Angeles temperature inversions often combine with exhaust gases to produce the acrid haze that the city has been trying to banish for 18 years. It has been estimated that some 500,000 gallons of gasoline escape unburned from cars every day, mainly as a result of incomplete combustion, and get trapped by warm air in the "kettle" that is formed by the city's encircling mountains. The hydrocarbons and nitrogen oxides contained in auto exhaust gases then "cook" in sunlight, reacting photochemically to form smog. The seriousness of this problem finally led to action by California's Legislature requiring that most new U.S.-made cars sold and registered in the State be equipped with exhaust-control devices beginning with the current model year. The standards recently promulgated by Washington relating to 1968 model automobiles essentially follow the California pattern. They apply as well, however, to imported cars.

"Although expert opinion is divided as to whether California-type exhaust-control devices actually are needed elsewhere, most car buyers in metropolitan areas probably will pay the extra charge uncomplainingly. Most

large cities have so many air pollution problems that the layman tends to think that anything which may cut down the dirt in his air is to the good.

"The large industrial city can actually be viewed as a vast combustion chamber daily converting thousands of tons of fuel into the energy and heat that underpin modern life. Amenities and progress result, but so too do problems and pollution. Soot and fly ash are the housewife's constant bane, adding to her cleaning chores, blackening her wallpaper, and inflating her laundry bills. Gaseous emissions corrode metals, irritate eyes, offend noses, and reduce visibility. So far, fortunately, the soot and fumes have been more a nuisance than a proven health hazard, but in a few isolated episodes in this country and in Europe acute air pollution, associated with temperature inversions lasting for several days, has been accompanied by increases in the death rate. Unless the tempo of antipollution attack is quickened such episodes could become more common in the future, assuming a continuing trend in the direction of an ever more urbanized and industrialized society.

#### "WHAT TO DO"

"But while it is clear that something more must be done, it is far from clear precisely what that 'something' should be. A report issued last November by the President's Science Advisory Committee frankly acknowledged that 'there are many areas in which ignorance constrains our ability to deal effectively with pollution problems'.

"An orderly approach to air pollution control logically would involve the setting of standards by each community for the quality

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of its air, followed by efforts to curtail the most damaging emissions. There are real difficulties in the way of this procedure, however, because it entails not only an assessment of the technological feasibility of curtailment for specific emissions but also a weighing of the costs of control in relation to the costs of damage that occur in the absence of control. In the present state of the art, measurements of costs and benefits are in most instances too imprecise to yield a reliable guide to action.

"Given this situation, the excitement that characterizes much public discussion of what should be done is all too likely to lead to hasty or arbitrary proposals for curbing those sources of pollution that for one reason or another have aroused the most alarm. Highly questionable, for instance, is the recent recommendation of a committee of the New York City Council that exhaust-control devices be required by 1969 on all cars, old as well as new. Automotive engineers simply haven't been able to perfect a control device

for installation on old cars that is economically feasible, and it is because of this that California, after considerable study, decided to limit its requirements to new vehicles.

"A variety of arbitrary proposals also have been made for curtailing sulfur dioxide emissions in New York City, including recommendations that the burning of coal be banned and that stringent limitations be placed on the sulfur content of fuel oil. Some proponents of these steps acknowledge that very difficult problems would be involved, ranging from costly furnace conversions to the limited market availability of low-sulfur oil that in part is the result of national policy limiting petroleum imports. Other advocates are either less candid or less informed. They would have it appear that the recommended shift in fuel-consumption patterns could be accomplished easily and quickly if fuel users were only more public spirited.

#### "PAYING THE BILL

"If businesses and communities are to be expected to install control equipment on a massive scale to abate air and water pollution, more thought will have to be given to methods of inducing them to make the necessary investment. It needs to be frankly recognized that there is little motive in most cases for the individual business unit to assume unusual costs in order to reduce or prevent pollution, particularly if competitors aren't doing so. Control equipment is non-productive so far as yielding any marketable product is concerned. In a competitive industry, it may represent the marginal item of cost that prices a company out of some market. Recognizing this, a community eager to attract new plants may be tempted to relax in enforcing pollution regulations.

"The incentive for spending public funds on pollution abatement is also limited. Cities all over the country are pressed to provide services of all kinds to growing populations. Investment in modernized sewage treatment plants or incinerator stations can have less voter appeal than spending for police protection or schools.

"Still another deterrent to abatement is the fact that the unpleasant effects of pollution are often so widely diffused that they may not be troublesome to those immediately involved in creating them. Conversely, the benefits of control are usually enjoyed by people other than those who pay the bill. The community that treats its sewage before discharging it into the river, or the plant that catches fly ash in its smokestack, may not itself enjoy cleaner water or air. The beneficiary may be a neighborhood some distance downstream or downwind.

"The problem of pollution thus doesn't respond easily to commonsense maxims about 'getting what you pay for.' If the problem is to be corrected a way will have to be found

to channel the general desire for a cleaner society into an acceptable method of getting up the money to pay for it.

"One promising suggestion, aimed at fostering greater activity in the antipollution field by industry, would have local, State, and Federal governments give tax incentive to business. Mr. W. G. Laffer, president of Clevite Corp., recently proposed a combination of investment credit, accelerated depreciation, and exemption from property taxes on pollution-control equipment. Certain States already provide some tax relief. New York, for instance, permits a 1-year writeoff on water-pollution controls, and Ohio exempts such equipment from property taxes.

"An alternative to incentives that is sometimes suggested would be a system of charges levied in proportion to the amount of harmful waste put into the water or the air. Effluent charges are used in the Ruhr region in West Germany, where they have helped to prevent deterioration of water quality in a heavily populated and industrialized area. This approach has been tentatively endorsed by the President's Science Advisory Committee. Such a system, however, would have the disadvantage of necessitating the creation of a large inspection and measurement apparatus. It could prove more costly in the long run, therefore, than tax incentives.

"To speed municipal efforts, State and local officials have been urging larger Federal grants to communities for abatement purposes, especially for investment in sewage treatment plants. With local funds widely inadequate to the task, construction of sewage facilities has not kept up with the growth of waste loads. Federal grants for construction of municipal sewage works have lightened local burdens somewhat, but the ceilings Congress has placed on the amount that can be granted for each project discriminate against the most populous States—whose pollution problems are the most severe. These ceilings should be liberalized, as Governor Rockefeller has recommended, and Congress should give high priority to raising grants to local authorities for sewage plants above the present total of \$150 million a year.

"Actually, the problem which local communities face in providing adequate sewage facilities is merely one small part of what has been aptly termed 'the crisis of the cities'—of burgeoning urban needs in the context of limited financial resources. Urban problems in general probably aren't going to be solvable until tax revenues are more equitably shared between Federal and local governments. Some variant of the so-called Heller plan, which would substantially increase the amount of Federal tax collections channeled back to States and localities, may be the answer.

"Collaboration between Washington and State and local officials also is necessary to help define industry's role in pollution abatement and to calm down some of the shrillness that presently prevails. In too many instances, slogans—such as 'Let the polluters pay'—have substituted for analysis. The production of pollutants, it needs to be understood, is not the consequence of perverse business behavior but the 'inevitable concomitant,' as the President's Science Advisory Committee has noted, of technological activity.

"Businessmen, while they direct much of their activity, can neither be credited with all its benefits nor held uniquely accountable for all its unwanted byproducts. The dividends and debits alike are society's to share.

"If substantial pollution-control costs are to be built into the business process, it is society at large that is ultimately going to pay the price of those costs just as it now pays for other social objectives—such as factory safety, abolition of child labor, and minimum wages—that have become accepted costs of doing business. Clean water and clear air simply aren't free goods. Recognition of this is the vital prerequisite to the development of sensible abatement programs."

The bill (S. 2857) to increase the investment credit allowable with respect to facilities to control water and air pollution, introduced by Mr. COOPER (for himself and Mr. RANDOLPH), was received, read twice by its title, referred to the Committee on Finance, and ordered to be printed in the RECORD, as follows:

"S. 2857

*"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) section 46(c) of the Internal Revenue Code of 1954 (relating to definition of qualified investment for purposes of determining the credit for investment in certain depreciable property) is amended by adding after paragraph (4) thereof the following new paragraph:*

*"(5) FACILITIES TO CONTROL WATER AND AIR POLLUTION.—*

*"(A) In the case of section 38 property which consists of facilities or equipment to control water or air pollution, the amount of the qualified investment shall be twice the amount determined under paragraph (1).*

*"(B) For purposes of subparagraph (A), the term 'facilities or equipment to control water pollution' means a facility or equipment used to control water pollution by removing, altering, or disposing of wastes from any type of manufacturing or mining process, including the necessary intercepting sewers, outfall sewers, pumping, power, and other equipment, and their appurtenances.*

*"(C) For purposes of subparagraph (A), the term 'facilities or equipment to control air pollution' means a facility or equipment used to control atmospheric pollution or contamination by removing, altering, or disposing of atmospheric pollutants and contaminants from any type of manufacturing or mining process."*

*"(b) The amendment made by subsection (a) shall apply to taxable years beginning after December 31, 1965."*

Mr. RIBICOFF. My response is this: If the Senate persists in a good cause that has basic public support, the administration will not be far behind. Even if we fail this year, I am certain that very shortly we shall be able to turn a temporary defeat into a permanent victory.

I yield to the Senator from Wisconsin.

Mr. NELSON. I concur in the remarks of the Senator from Connecticut and others.

I have introduced a bill which tackles the question of tax writeoffs and the question of giving consideration to matching funds to industry for the installation of treatment facilities.

I believe that the tax writeoff should be at the option of the industry, that the industry should be able to write off in 1 year, 2 years, 5 years, or 10 years the cost of the pollution devices that are required to be installed—whatever is in the best economic interest of the company. It will be difficult to give enough inducement to achieve the job that needs to be done.

Also, I believe Congress should give consideration to whether a formula can be developed to give some matching grant funds to industry to do this job. The cost to the public is exactly the same.

Historically, the policy in this country has been to punish the polluter, but pollution laws have been passed and not

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enforced. If any State in the United States effectively enforced tough anti-pollution laws, it would have a serious tax effect, both upon the communities and the industries against which they



are enforced. This matter is important enough to some industries so that they would actually move.

I am informed that if treatment facilities meeting the highest status of the art are installed in a paper mill, the cost involves 25 percent to one-third of the total investment in the plant.

If tough enforcement required every industry in America to reach the highest status of the art, all of the cost would ultimately be borne by the consumer, anyway. The cost of the automobile would go up to that extent, the cost of steel would go up to that extent, the cost of paper would go up to that extent.

Therefore, to give tax advantages, tax writeoffs, and matching funds or grants, if a reasonable formula can be figured out, would cost the taxpayer the same amount, whether it would come out of the Federal Treasury or would be built into the cost of the product ultimately bought by the consumer.

I am glad this question has been raised. I shall be glad to join with any group of Senators in sponsoring such legislation.

Mr. JACKSON. Mr. President, in connection with our consideration of S.2947, I call to the attention of the Senators the Water Resources Planning Act, which was enacted in the first session of this Congress. This act, which is Public Law 89-80, found in 79 Stat. 244, establishes a National Water Resources Council, composed of the officers of Cabinet level rank of the Federal Government who have responsibility for water resources in the United States, as an overall study, planning, and programming agency.

Title II of the act authorizes establishment of River Basin Commissions for comprehensive planning and coordination of Federal, State, and local water resource development activities in particular river basins or groups of river basins within a region.

Pollution control, of course, is but one aspect—although a very important aspect, to be sure—of the water problems facing our Nation. The relationship of pollution control and other water prob-

lems was clearly set forth by Elmer B. Staats, Deputy Director, Bureau of the Budget, in his testimony before the Interior Committee on February 5, 1965, expressing the support of the administration for S. 21, 89th Congress, the bill that became the Water Resources Planning Act.

Mr. Staats said:

The problem areas that confront us in the water resources field are immense and varied. They include flood control, navigation, hydroelectric power, pollution abatement, and water quality control, municipal and industrial water supply, irrigation, recreation, and fish and wildlife conservation.

In general, the overall national water supply is abundant, but it is not distributed equally. Shortages in some sections of the country are becoming critical and tend to restrict economic growth. At the same time, in areas with adequate quantities of water, problems arise because of floods and pollution.

The pollution of our streams and rivers is of grave importance and of particularly deep concern because of the impact of water quality on all water uses. Studies reported in 1961 by the Senate Select Committee on National Water Resources, based on data furnished by the Public Health Service, estimated the need for investment in sewage and industrial waste collection and treatment facilities alone would amount to over \$42 billion between 1954 and 1980, and over \$81 billion by the year 2000.

Thus, our goal must be to develop, manage, and utilize our basic water supply to meet demands as they arise—both in quantity and quality. The development of these vital resources is a vast undertaking which is growing larger. Proper development will require the concerted and coordinated action of Federal, State and local agencies which this bill is designed to facilitate.

Mr. President, on behalf of the Committee on Interior and Insular Affairs, which is the unit of the Senate that has general legislative responsibility for nationwide water resource matters, I wish to commend the very able Senator from Maine and his subcommittee, and the able chairman of the full committee, the Senator from West Virginia [Mr. RANDOLPH], for the exemplary standards that have been set in considering and working out the specialized provisions of S. 2947. I note that the Secretary of the Interior Udall, in his testimony on April

20 of this year in support of the administration's clean rivers bill, S. 2987, the provisions of which have been amalgamated with the reported measure, S. 2947, before us today, stated:

The bill provides for designation of a planning agency for a selected river basin. In most cases, that planning agency will be a river basin commission established pursuant to the Water Resources Planning Act. In others, however, we may want to establish a commission such as the Delaware River Basin Commission . . . or to work with and through some other type of agency.

This statement is found on page 109 of the subcommittee hearings.

Mr. President, I am sure Senators will agree that the legislative history of the Water Resources Planning Act makes clear the overall jurisdiction of the Water Resources Council and the River Basin Commissions in comprehensive basin-wide planning to insure high water-quality standards. Activities of State and local planning agencies authorized by S. 2947 must not supersede the water-quality responsibilities of the Council and Basin Commissions created by the Water Resources Planning Act. Rather, such agencies will supplement and complement the work of the Council and Commissions when S. 2947 cannot reasonably be implemented and carried out through the provisions of the Water Resources Planning Act.

The Committee on Interior and Insular Affairs will follow closely and programs and activities of the Water Resources Council and the River Basin Commissions to be sure that they are fully aware of their congressional mandate to plan for the restoration and maintenance of high water-quality standards. My committee will also continue to be deeply interested in any legislative proposals relating to comprehensive river-basin planning against pollution of all kinds, and we will be happy to cooperate with the Committee on Public Works.

In this connection I wish to call attention to my announcement that ap-

pears in yesterday's RECORD setting July 20 as the date for the confirmation hearings on the nomination of Mr. Frank C. DiLuzio to be an Assistant Secretary of Interior under Reorganization Plan No. 2 of 1966. One of Mr. DiLuzio's responsibilities in the new post will be the administration of the Federal water pollution control program, among other water and related programs.

I wish to cordially invite the members of the Committee on Public Works, particularly the able Senator from Maine [Mr. MUSKIE] to participate in those hearings, if they desire.

Mr. FONG. Mr. President, as a member of the Committee on Public Works and a cosponsor of the bill, I wish to commend and congratulate the distinguished and able Senator from Maine [Mr. MUSKIE], the chairman of the subcommittee which held hearings and worked on the bill, the ranking minority member [Mr. BOGGS] on the subcommittee, and all other members of the Committee on Public Works for their splendid and diligent efforts in bringing to the floor of the Senate this very far-reaching and excellent bill which will mean so much to the health, welfare, and happiness of the American people.

The cleaning of our stream and rivers is a gigantic problem. At a conservative estimate it will cost over \$100 billion to clean our rivers and streams and keep them clean up to the year 2000. I hope that the moneys which have been authorized in the pending bill will be a strong beginning to alleviate the very bad condition of our polluted rivers and point the way for us to having all our rivers and streams flowing with clear and clean unpolluted water.

I wish to thank the distinguished Senator from Maine [Mr. MUSKIE] for accepting my suggestions that the definition of the term "river basin" include the word "streams" and also that the term "estuarine zones" include "bays" and "harbors" to take care of the peculiar conditions in the State of Hawaii. This will encompass Hawaii in the clear rivers

restoration program and in the estuary study.

This is a good bill and I intend to support it.

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The Senate resumed the consideration of the bill (S. 2947) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

Mr. RANDOLPH. Mr. President, 47 Members of the Senate are joined with EDMUND MUSKIE, of Maine, in supporting the proposed legislation, not only in its purpose, but also by attaching their names to S. 2947, the bill itself. This is indicative of the general approval of the purposes of the legislation which the Senate is considering this afternoon, the amendments to the Federal Water Pollution Control Act.

I desire to say, on behalf of the Committee on Public Works and of its Subcommittee on Air and Water Pollution, that all of us, both on the Democratic and Republican sides of the committee, are joined in our commitment, which we feel is the commitment of the Senate, to move affirmatively in the field of pollution abatement and control, both of air and of water.

The distinguished Senator from Kentucky [Mr. COOPER] and all the other Senators who form the Republican component of the committee have worked diligently and with determination in the hearings and in executive sessions of the subcommittee and the full committee. This is testimony to the positive manner in which we are moving on this important, this vital, legislation.

Yesterday, on the amendments to the Air Pollution Act, the vote on passage was 80 to 0. Today it is our hope that a unanimity of opinion will again be expressed in the yea-and-nay vote which has already been granted.

Earlier this afternoon, the distinguished Senator from Indiana [Mr. HARTKE] made a reference of pleasantry to the coat that I am wearing today. A

younger man would, of course, call it a blazer. It is ablaze with color. It displays the colors of West Virginia—blue and gold and was presented to me last year by the young men of the National Youth Science Camp. Because the Senator from Indiana made reference to this jacket, I invite attention to the fact that in Washington, D.C., today are 100 delegates to the National Youth Science Camp, which is held annually in West Virginia. They have been in Washington as a part of the 3-week program which is carried on largely in the State of West Virginia, in the historic section of Pocahontas County, at Green Bank, near the famous observatory. The group is comprised of two young scientists from each of the 50 States.

They were challenged today, at the luncheon meeting, by the words of the Vice President, Hon. HUBERT H. HUMPHREY, who pointed out that no matter how scientific an age we live in, we must realize that the ultimate in science is the heart of the scientist himself. I shall not attempt to speak of the eloquence with which the Vice President made this point—a very moving and telling one. But I shall, at a later appropriate time, ask unanimous consent to have printed in the RECORD the address of the Vice President of the United States to these 100 young men who are here in the city today.

Later this afternoon, the Science Camp delegates were privileged to meet the President of the United States and to be present as he commissioned a modern research vessel as a further development in the relatively new field of oceanography. At the navy yard they listened to the words of the President as he indicated that at the bottom of the sea are the substances with which life will increasingly be sustained and sweetened in the years ahead.

As these high school students were addressed by the Vice President during today's luncheon, so in previous years they have visited with other leaders of scientific thought and effort in the Federal

Government. In 1963, the inaugural year of the Science Camp, and West Virginia's Centennial year, the speaker at the Washington luncheon was Hon. James E. Webb, Administrator of the National Aeronautics and Space Administration. In 1964 our guest of honor was the Chairman of the Atomic Energy Commission, Dr. Glenn T. Seaborg. Both Dr. Seaborg and Mr. Webb were present at the gathering this afternoon.

Last year, Gen. Bernard A. Schriever, Commander of the Air Force Systems Development Command addressed the delegates, and discussed with them the rapid advances of our Nation in building airpower. Distinguished visitors at the camp itself have included Astronauts Neil A. Armstrong and M. Scott Carpenter, as well as Col. Charles E. Yeager, commander of the U.S. Air Force Aerospace Research Pilot School.

During the 3 weeks of the National Youth Science Camp the young delegates participate in a wide range of science-oriented activities. Included are field trips, panel discussions, lectures, guided tours and classroom sessions, all under the direction of a capable staff. Director of the camp is Prof. Charles N. Cochran, of the mathematics department of West Virginia University. He is ably assisted by Joseph M. Hutchinson and Robert D. Slonneger, associate directors, and a staff of counsellors who are scientists in their own right.

I commend the delegates to the West Virginia National Youth Science Camp, and express appreciation to those dedicated individuals who give their time and energies to see that this event is well organized and smoothly administered each year. The State of West Virginia is gratified that so many Members of the U.S. Senate could be present at today's luncheon to greet the youthful scientists, and to hear the Vice President. These young men are aware that among the principal duties of every citizen is that of keeping informed on issues of national significance.

Mr. President, we are belatedly aware

as a nation that the seemingly limitless resources of this rich land are indeed limited. We cannot and we must not, if we are to preserve the bounty of this land for future generations, continue to waste and despoil our water, our soil, and our other natural resources.

S. 2947, of which I am privileged to be a cosponsor, offers dramatic evidence of the concern throughout the United States and within the Senate for the problem of water pollution control. While this bill is not the final answer to the problem of water pollution, its passage will provide essential funds to combat the problem and to forestall even more serious water quality crises in the future.

I compliment the subcommittee members on this forward moving bill, and the work which produced it. Last year, the Congress took a great stride ahead in the enactment of the Water Quality Act of 1965. This authorized the promulgation of standards of water quality in interstate streams. Virtually all of the pollution abatement bills that have been heard before the committee have had their parentage in that act. This fact testifies to the years of labor and effort by the members of the committee which came to culmination in the Water Quality Act of 1965.

I further congratulate Senator EDMUND S. MUSKIE, the chairman of this subcommittee, for his tireless efforts on behalf of water pollution control legislation. This bill is a testament to his vision. The newspapers refer to him as "Mr. Water Pollution." Senator MUSKIE has won the admiration of his colleagues for his work as chairman of the subcommittee by developing a comprehensive and coherent program to attack the problems of water pollution.

The pending measure is the product of hearings and conferences conducted by the subcommittee last year and this, and the basic authorization figure of \$6 billion proposed was not just drawn out of the air. It represents the best estimate of professional intelligence, that is, the Federal portion of one-third of

the \$20 billion estimated as the need for municipal sewage treatment work required by 1972.

Mr. President, even this amount, if authorized and appropriated, would not complete the job. It would provide treatment facilities for 80 percent of our population. But more important, it is my understanding that when we refer to secondary treatment process as withdrawing 90 percent of the biological oxygen demand, we are referring to only

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90 percent of the 68 percent of the biological oxygen demand, which is processed in a 5-day treatment period.

It is for this reason, among others, that the research and demonstration funds that are proposed are of primary significance, for we need to find economical methods of removing 90 percent of the total biological oxygen demand, not just 90 percent of two-thirds of it.

The river basin planning approach, originally suggested by the administration, contains imaginative and constructive concepts. Pollution must be attacked at every point in the watershed, if true control is to result. The State and interstate planning agencies which this bill authorizes will be most helpful if the terrific water pollution problems we face in West Virginia are to be solved.

I speak with conviction not only as chairman of the Committee on Public Works, but also as a Senator from the State of West Virginia, a State which has often been referred to as the Mother of Rivers, because the origin of so many rivers occurs among our West Virginia hills. Yet, many of these streams, flowing from pure springs and freshets in the mountains, take on some characteristics of industrial and municipal sewers as they run to the sea.

Such a river is the Monongahela, formed by the confluence of the West Fork and Tygart Rivers at Fairmont, W. Va., the drainage basin including the southwest corridor or corner of Pennsylvania, the northeast portion of West Virginia, and a small section of western

Maryland. The Monongahela and its tributaries are severely polluted by the discharge of untreated and inadequately treated municipal sewage and waste, and mine wastes.

I am told that the rudder of a river barge on the Monongahela River lasts from 6 to 8 months, due to the action of mine acids, as compared to an average lifetime on the Ohio River of approximately 18 months. I add that the Ohio River leaves much to be desired in the field of pollution abatement.

Another heavily polluted river in West Virginia is the Kanawha River, which originates in the south-central region of our State, in Fayette County. From there, it flows in a northwesterly direction for approximately 97 miles, before emptying into the Ohio River. Though the Kanawha is entirely within the boundaries of West Virginia, it is a major tributary to the Ohio River, and wastes discharged into the Kanawha affect the Ohio. The Kanawha Valley in the area of Charleston is frequently referred to as the little Ruhr, because of the heavy concentration of industries, largely petrochemical. There are approximately 30,000 employees and hundreds of millions of dollars of capital investment in the chemical industry in the Kanawha Valley.

These industries are a major segment of the economy, not only of that area, but of the State. And though they are a source of great economic benefit to our State, they are also a source of water pollution. It is my desire that Congress enter into a working partnership with private industry through government tax incentives in this effort for clean air and pure water.

Several years ago the State water pollution control commission directed the industries of the Kanawha Valley to reduce their pollution load by 50 percent over a 5-year period. I am informed that substantial progress is being made, but much remains to be done by both the industries and the municipalities that are located on the river.

Finally, there is the Ohio River, which is formed by the Allegheny and the Monongahela Rivers at Pittsburgh and flows into the Mississippi River at Cairo, Ill., some 900 miles below its point of origin. This great river includes in its drainage basin parts of the States of Pennsylvania, Ohio, West Virginia, Kentucky, Indiana, and Illinois. In each of the five areas of the basin, there are serious interstate pollution problems; and these come from industrial and municipal wastes.

I speak not only for West Virginia, but for the region in which critical problems of an interstate nature have developed, but also focus attention on a pressing national problem.

The need for Federal direction in legislation is clear. The funds which this bill would authorize are only a fraction of what will be required across the country to insure clean water for present and future generations. Increased Federal grants will serve to stimulate the necessary State, interstate, and local participation that must be provided if we are to eradicate pollution of the waters in this country. The research provisions of this legislation will provide the tools needed for further development of a cohesive water management program.

We must control pollution by every means at our disposal; we must actively seek new techniques to match the enormity of the problem. S. 2947 is a step—a step in the right direction—but it cannot be considered the final step.

The Federal commitment to water pollution is and must be a continuing one. Passage of S. 2947 will assure that this commitment is expanded and continued.

In the passage of S. 2947, we shall take another step forward. It is not the final step. It is certainly a very good beginning, and I compliment all the members of the subcommittee and of the committee who have worked with such effectiveness on this legislation. I assure the Senate that it has the full commitment of its Committee on Public Works and its Subcommittee on Air and Water Pol-

lution to go into these matters thoroughly because we realize that here there will be involved tremendous sums of money, and the necessary partnership with private industry must not be disregarded.

Incentives to private industry must be written into law, to make effective the partnership between Government and the segments and units of business and industry in this country. As we attack this problem, it must be a broad, strong, frontal attack. But also, we must move carefully and cautiously.

I say to the Senate that insofar as I am concerned, I will not lend my influence or assistance to bringing to the Senate floor proposed legislation which is not well reasoned. There will be differences of opinion, certainly; but I am not concerned when such differences exist. I am concerned when in the Senate of the United States or in the country we are indifferent to a problem of this magnitude. There is a great difference between differences of opinion as to how best to approach a problem and the tragedy of indifference among our people.

So if the Senate can express this afternoon, as it did yesterday, the aspirations of the American people for solutions to these great problems, I think we shall do well, and work our will in the public interest.

Mr. TYDINGS. Mr. President, I should like to associate myself with the remarks of the distinguished chairman of the Committee on Public Works. I agree with him that the bill which is before the Senate, if passed will make and mark a significant step in the long and costly struggle to clean up our Nation's waters. For the first time, the Government of the United States will authorize realistic allocations of our natural resources to try to abate pollution. I am pleased and proud, Mr. President, to have been one of the 48 Senators who cosponsored this legislation with the distinguished Senator from Maine.

I believe that the Nation, and particularly those of our citizens who are concerned with conservation, with the preservation of our great natural resources of water and air, should recognize the debt that we owe to the junior Senator from Maine [Mr. Muskie], the chairman of this subcommittee, who has been a leader in the forefront of this field for many years, and whose guidance, direction, and wisdom are really the prime motivating force behind the legislation upon which the Senate will vote this afternoon.

It has been my privilege to serve on his subcommittee. I have witnessed his leadership, his expertise, his ability to utilize the staff and the other members of his subcommittee for the public betterment; and I think that we are very fortunate in having a Senator of his caliber as chairman of such an important subcommittee, managing legislation in certainly one of the most vital fields in the entire domestic sphere of legislation for this country.

I think it unnecessary at this time to review the entire contents of S. 2947 but I do want to point out three aspects of the bill which deserve special mention. The first authorizes the Secretary of Interior to make a comprehensive study of pollution in the estuaries and estuarine zones of our country.

Tidal estuaries, Mr. President, are those areas where the fresh water meets the sea. It has been estimated by responsible scientific leaders that approximately 70 percent of all edible fish, sport fish, spend at least half of their lives in estuarine waters. Estuarine waters included the great bays, the inlets, and the sounds. There is no coastal area of the United States whose estuaries do not attract hundreds and thousands of people

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to fish, to swim, or to enjoy the benefits of the waters.

Yet we know very little about these estuaries. This bill will authorize the first comprehensive study of estuarine life and the estuarine zones in the United

States which has ever been authorized. The study will consider sedimentation, fish and wildlife, recreation, water supply and power, demographic trends, mineral resources and fossil fuels, navigation, flood and erosion control, and land and industrial development. Only through such a complete study can we learn what we need to know about our estuaries. These bodies of water—the mixing area of fresh and salt water—are of great significance to the country and are now threatened by the destructiveness of man. We must act now to learn about our estuaries so that we may act soon to preserve, protect, and develop them.

A second aspect of the bill which deserves consideration is the calling for a study of boat and vessel pollution. The committee did not feel that it should propose sanctions or rigid regulations without first studying the effects of boat and vessel pollution. We shall have the benefits of that study. However, the legislation should serve notice to all those interested in marinas and boats, both pleasure and otherwise, that they have certain responsibilities to preserve the cleanliness of our rivers, streams, and waters.

The final section of the bill, which I feel deserves special attention, is that section which is concerned with the availability of trained personnel in the pollution and sewage maintenance and operation field.

As the report of the committee stated:

Proper and efficient operation and maintenance of these plants is the key to the effectiveness of the water pollution control program.

Unfortunately, we do not have sufficient trained personnel.

Testimony before our committee, given by responsible leaders, was to the effect that we could increase the efficiency of most small sewage plants by as much as 50 percent if we had trained personnel operating the plants.

This bill makes a significant step forward.

The report also pointed out the useful

work done in this area by the distinguished junior Senator from Massachusetts [Mr. KENNEDY]. His suggestions I think are well thought out and certainly have received the consideration of all his colleagues.

I myself am now preparing legislation to fill this manpower gap and hope to introduce it in a short while. In summary, I feel that we must not underestimate the importance of providing enough trained people in the field of water pollution control, and that we must act now to meet this manpower need.

Mr. President, I yield the floor.

Mr. LAUSCHE. Mr. President, I ask unanimous consent that the testimony which I gave before the Subcommittee on Air and Water Pollution of the Committee on Public Works on Wednesday, April 27, beginning on page 191 and going to the top of page 198 be printed in the RECORD.

There being no objection, the statement was ordered to be printed in the RECORD, as follows:

STATEMENT OF HON. FRANK LAUSCHE, A U.S. SENATOR FROM THE STATE OF OHIO

Senator LAUSCHE. As a preliminary to my testimony, Senator, do understand that I at one time was mayor of Cleveland and subsequently Governor of Ohio. In those two capacities I had ample opportunity to learn of the problem confronting Ohio's metropolitan cities, especially, and also the rural areas dealing with the pollution of streams.

Ohio has 230 miles of shore on Lake Erie. Its metropolitan centers are in a substantial degree located on Lake Erie. This bill provides an authorization to expend \$6 billion, as I understand, for the granting of help to local and State governments in their efforts to remove pollution from the streams and lakes and inland water bodies.

The contemplation is to make available \$1 billion a year over a 6-year period and that that \$1 billion a year will be used as an incentive system stimulating the local government authorities and people to develop programs that will purify the waters that are so essential to our living.

Last February 2 on the floor of the Senate I spoke at length on the subject of water pollution. At that time I pointed out some of the weaknesses in our program of attack I said in part, making reference to a conference which I earlier had with officials of the division of water supply and pollution control

of the Department of Health, Education, and Welfare:

"It was generally agreed that the Federal grant programs and enforcement actions under existing laws are not adequate to combat the problem of water pollution. The program as it now exists needs to be reorganized. There is a need for a more realistic and fair distribution of funds provided by the Federal Government. Under the present law there is no provision for participation by larger metropolitan areas due to existing dollar ceilings, per capita income restrictions, and so forth, which make their participation unfeasible. They are the areas where the need is most urgent. In addition to the need for reorganization of the present program, more funds will have to be provided."

That is the end of the quote which I made on the floor of the Senate last February 2.

Senator MUSKIE, I am pleased to see that several of the important recommendations made generally and to which I subscribed are contained in the subcommittee's bill, S. 2947: One, increasing the amount of Federal grant money to municipalities.

Two, removal of serious and stifling limits or ceilings on individual project grants. These limitations have been serious and have only delayed progress and action where most needed.

Three, the bill would provide incentives for States to participate through a matching bonus. And, four, then it would provide for a long-term low-interest program to assist communities where local resources are not adequate to meet the local share.

In my opinion the most important problem facing our Nation today is our contest with the Communists of South Vietnam.

Four, and give priority to neither, I would put the subject of eliminating pollution in our streams and the fight against inflation. Unless we clean the waters that are so essential to our life, we can anticipate that there will be nothing but frustrations, agony, and despair in the future.

The need of solving this problem is long overdue and unless we attack on a mass basis now, its towering insolubility will grow worse. Six billion dollars I admit seems like a large sum of money. One billion dollars a year, especially having in mind the national debt of the present day, the responsibilities in connection with the Vietnam war, and the general program in which we are trying to improve the welfare and life of our people.

But if there is to be retrenchment in spending, I say to you respectfully that there are other fields which that retrenchment can be done in with far greater justification than in this field of fighting air pollution and water pollution.

If it were my way, I would put this program in the very top ranks of the time for solution.



If I may digress for just a moment, I travel from border to border of the State of Ohio by automobile and by small plane, and the subject of water supply is one of the keen ones. Rather tragically at a time when the land was covered with legumes and grasses and trees and when wildlife and bird life was abundant, our ancestors, with good intentions, did not recognize what the problem would be with those who followed them because of the indifference to the demands that water resources and natural resources be preserved.

I would like to leave this thought with you, Senator MUSKIE, that in Ohio we have considerable strip mining and that strip mining program has created toxic conditions. When the coal is exposed to the air the elements in the air coming in contact with the coal produce a poison and those poisons are moving down into the streams in many places.

I merely point that out in addition to the indifference frequently of industrialists of the past to take measures to keep the waters clear.

There is an urgent need for a crash program with the full support of the Federal Government and State and local governments. Water pollution is one of the greatest blights upon our Nation today. Too long we have closed our eyes to the seriousness of this all important problem and we have allowed it to grow until it now engulfs many areas and cities and threatens their economic existence.

Too long have cities and municipalities and industries rid themselves of their wastes only to damage those downstream. I cannot help but carry my mind back to the law school when we studied real property and discussed the right of riparian owners, and that is the riparian owner had the right to the water that passed by his property in the form of a creek or a river and that the upstream owner was not allowed to contaminate or to divert or to create conditions that would likely cause floods.

That law seemed to me sound. I remember clearly the Latin maxim, *sic tuo utere aut alienum non laedas*, you use yours not to injure that of others. That was the law applicable to the individual. Yet the Government paid no attention to it. We used our own to satisfy our whims, completely indifferent of the rights of those who were downstream, and completely indifferent to the rights of those who were to follow us in the habitation of our land.

Too long, Mr. Chairman, have we subscribed to the policy "out of sight, out of mind" and dumped wastes into rivers to get them out of our own backyards.

I point an accusing finger to no one. We as a nation however, have misused one of our natural heritages, our waterways and for

more than a century and now we must face up to those wrongful acts and pay the price.

The very areas that are most responsible for this present condition are now the ones that are most plagued by their sins of the past and present. While some progress in pollution abatement is being made in the Nation as a whole, with Federal aid to the States and municipalities it is far too little

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and in highly developed industrial regions we are losing ground.

At the pace we are now moving it will take a century to clean up our rivers and lakes and manifestly that will be too late. In the meantime, some navigable lakes will have become dead and ports and cities will have suffered irreparable economic blight.

Industry, so dependent upon water, will have moved elsewhere. Ultimately, area economies will be so adversely affected that it will be reflected in marked reductions in Federal, State, and local taxes.

Senator MUSKIE, in the Union School of Theology at Cincinnati we have an archeologist by the name of Glick. He has won wide acclaim and fame in archeological research in Israel. He wrote a book after his research there. Standing out in that book is the theme that the great difficulties of the ancestors in Israel was in their quest for water.

Every little spring and stream was utilized. They fought for water. There was a lesson that should have caused us and other people everywhere to understand the significance of having an adequate water supply and of course a water supply means plenty of water. It does not mean poisoned and contaminated water.

Mr. Chairman, to demonstrate the importance and the immediacy of the problem, it should be pointed out that the entire population and industrial complex in the Great Lakes States is based upon their proximity to the largest source of fresh water in the world, the five Great Lakes.

The adverse effect which loss of our irreparable damage to this natural resource upon the continued economic growth and success of this complex is self-evident. It should be noted that already some 40 percent of our urban population and a higher portion of our industrial activity is located in only 4 of our 22 major river basins.

To repeat, 40 percent of our industrial complex is in 4 of the 22 river basins that we have. These basins frequently contain huge megalopolitan complexes and intensively developed watersheds where the gains for systematic approaches are likely to be large.

The Great Lakes Basin is one of the four that is relatively industrialized and with a rapidly growing population and the pollution situation is extremely acute. It is my

belief that those basins similar to the Great Lakes Basin which are facing emergencies should be given distinct priority in Federal assistance, at least as to timing, if not in relationship to the ultimate proportion of allocation of money that will be made.

Time is essential in those areas. It has been estimated that the cost of reasonably complete abatement of pollution in this country in a crash program would be from \$80 to \$100 billion over a period of 10 years. This figure I think will be disputed by many. Although it is given to me, Senator MUSKIE, through the conference which I had with the officials of the Department of Health, Education, and Welfare.

Senator MUSKIE. I don't think it is necessarily out of line, Senator LAUSCHE. Our estimate of \$6 billion for Federal Contributions to sewage treatment grants for 6 years is based on the concept of \$20 billion just for the current backlog in needed municipal plants.

That does not include the industrial problem. It does not include other aspects of the problem. So your figure is not necessarily out of line.

Senator LAUSCHE. In my judgment substantial Federal assistance is definitely needed. Far more liberal in both amounts of money and formulas for allocating grants than is permissible under existing law. I have a thought that I have not set forth in my paper that I would like to leave with this committee.

The highway program financed by the Federal Government I think according to present figures will cost \$40 billion. It is a self-sustaining program, the financing of which is made through excise taxes on gas and automobile accessories and tires.

I have tried to contrive some method of paralleling the fight against water pollution with the fight in eliminating the traffic hazards and congestion of the highways. I have been thinking of user taxes. But it is a rather difficult problem because we have no relationship of the intimate character in the water problem that we have in the using of the highways.

But I do suggest that this committee ought to give consideration of ways and methods of procuring additional funds to solve the problem. I further have the suggestion, which is not contained in my paper, that the committee should give consideration of working out a recommendation of some sort of accelerated depreciation writeoff of a capital investment so as to induce private industry to install pollution elimination devices.

I think now under the tax law if an industry does install a device to eliminate the pollution in its effluent it can depreciate that capital investment in a period of 19 years. We ought to study some incentive to urge them to expedite the installation and to ac-

celerate the period during which they can depreciate. That is, instead of making them wait 19 years and full depreciation, if we allowed them to depreciate in 5 years, I think that type of inducement would go a long ways in helping some—in helping solve the problem.

This is my case, Mr. Chairman, and I hope that the Senator from Pennsylvania today will give me support, though I sorrow when I think how often he fails to give it to me.

Mr. Chairman, I would now like to give my formal statement.

Senator MUSKIE. Please proceed, Senator LAUSCHE.

Senator LAUSCHE. Mr. Chairman, I am pleased to appear before your subcommittee today in support of S. 2947, of which I am a coauthor.

While this bill provides for a 6-year, \$6 billion program of grants to municipalities for treatment construction with the Federal Government paying 30 percent of the total cost, it is only a "drop in the bucket" in relation to the ultimate needs. It is, however, a step forward toward a goal in a nationwide battle for pollution abatement. The bill might have provided for greater sums of money and for even more liberal Federal assistance. Perhaps as progress is made under S. 2947 and other pollution bills previously enacted into law, needs can be reevaluated and modifications can be made to expedite and make even more effective our war against pollution. The 6-year, \$6 billion program for grants to municipalities, of course, places a heavy burden upon the Federal budget, which is already sorely taxed by military and foreign aid commitments. I say, however, that an adequate Federal pollution abatement program should have priority over most other domestic and public works programs, and, if there are to be any cutbacks or deletions because of budgetary problems, they should not affect our immediate attack against pollution. It needs and should be given the highest possible priority.

Last February 2, on the floor of the Senate, I spoke at length on the subject of water pollution and pointed out some of the weaknesses in our program of attack under Federal laws now existing. I said in part, making reference to a conference I had earlier with officials of the Division of Water Supply and Pollution Control of the Department of Health, Education, and Welfare, and I quote:

"It was generally agreed that the Federal grant programs and enforcement actions under existing laws are not adequate to combat the problem of water pollution. The program as it now exists needs to be reorganized. There is a need for a more realistic and fair distribution of funds provided by the Federal Government. Under the

present law, there is no provision for participation by larger metropolitan areas due to existing dollar ceilings per capita income restrictions, etc., which make their participation unfeasible. They are the areas where the need is most urgent. In addition to the need for reorganization of the present program, more funds will have to be provided."

Mr. Chairman, I am pleased to see that several of the important recommendations I made at that conference are contained in this bill, S. 2947. They include:

(1) Increasing the amount of Federal grant money to municipalities;

(2) Removal of serious and stifling limits or ceilings on individual project grants—these limitations have been serious and have only delayed progress and action where most needed;

(3) Providing for more incentive for States to participate through a matching bonus; and

(4) Providing for a long-term, low interest program to assist communities where local resources are not adequate to meet the local share.

Mr. Chairman, the most important problem facing our Nation today is winning the battle against pollution of our rivers and lakes, especially in those regions where the situation is desperately acute, as in the Great Lakes Basin.

There is urgent need for a crash program with the full support of the Federal Government and State and local governments. Water pollution is the greatest blight upon our Nation today.

Too long have we as a nation closed our eyes to the seriousness of this all-important problem and let it grow and grow until it now engulfs many areas and cities and threatens their economic existence.

Too long have cities and municipalities and industries rid themselves of their wastes only to damage those downstream.

Too long have they subscribed to the policy "out of sight, out of mind" and dumped wastes into rivers to get them out of their own backyards.

I do not point an accusing finger at anyone. We as a nation, however, have misused one of our natural heritages, our waterways, for more than a century, and now we must face up to those wrongful acts and pay the price. In fact, the very areas that are most responsible for this present condition are now the ones that are most plagued by their sins of the past and present.

While some little progress in pollution abatement is being made in the Nation as a whole, the Federal aid to States and municipalities, it is far too little and in highly developed industrial regions we are losing ground. At the pace we are now moving it will take a century to clean up our rivers and lakes, and that will be too late. In the

meantime, some navigable lakes will have become "dead" and ports and cities will have suffered irreparable economic blight. Industry, so dependent upon water, will have moved elsewhere. Ultimately, area economies will be so adversely affected that it will be reflected in marked reductions in Federal State, and local taxes.

Mr. Chairman, to demonstrate the importance and the immediacy of the problem, it should be pointed out that the entire population and industrial complex in the Great Lakes States is based upon their proximity to the largest source of fresh water in the

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world, the five Great Lakes. The adverse effect which loss of or irreparable damage to this natural resource upon the continued economic growth and success of this complex is self-evident.

It should be noted that already some 40 percent of our urban population and a higher portion of our industrial activity is located in only 4 of our 22 major river basins. These basins frequently contain huge megalopolitan complexes and intensively developed watersheds where the gains for systematic approaches are likely to be large. The Great Lakes Basin is one of the four that is relatively highly industrialized and with a rapidly growing population, and the pollution situation is extremely acute. It is my belief that those basins similar to the Great Lakes Basin, which are facing emergencies, should be given distinct priority in Federal assistance, at least as to timing, over those areas where the situation is not of an emergency nature.

It has been estimated that the cost of reasonably complete abatement of pollution in this country in a crash program would be from \$80 to \$100 billion over a period of 10 years. Obviously, to carry out such a program would be far beyond the financial abilities of State and local economies. Definitely, substantial Federal assistance is needed, far more liberal in both amounts of money and formulas for allocating grants than is permissible under existing law.

Mr. Chairman, in conclusion, I recommend that your subcommittee act favorably on this bill. As a coauthor, I am pleased to give it my wholehearted support.

Senator CLARK. May I say, Mr. Chairman, it is a rare privilege and a high honor, as Speaker Rayburn used to say, to find myself on the same side as the Senator from Ohio.

Senator MUSKIE. As a matter of fact, Senator LAUSCHE, I particularly welcome your testimony. I know that you and I and Senator CLARK disagree in several areas as to the responsibilities that the Federal Government carries.

To have your endorsement of this program and your expression of concern is a real boost

to our efforts.

We appreciate it.

Senator LAUSCHE. Senator TYDINGS, and Senator MOSS and Senator CLARK were not here when I said if there is to be any retrenchment let it not be in the fight against pollution. Let us retrench in other areas where the need is not so demanding and immediate as it is in this field.

Senator CLARK. Ohio and Pennsylvania both border on Lake Erie.

Senator MUSKIE. Senator CLARK, we are ready for you now. We welcome your presence. As I said before Senator LAUSCHE's testimony we are delighted so many Senators are coming here to testify or to submit a statement on this important subject. I think now you are No. 23.

We might get a majority before this committee before we are through.

(At this point Mr. HARRIS assumed the chair.)

Mr. ALLOTT. Mr. President, I am very happy to get the floor after waiting for an hour and a half and seeing other Senators come to the floor, be recognized, and leave after speaking.

It is indeed a privilege to speak to the Senate under these circumstances. I do want to address my remarks basically to the bill under consideration.

I am sorry that in the interim the distinguished Senator from Kentucky [Mr. COOPER] has had to leave the floor. I wanted to compliment him for the work he has done and for his introduction of a bill, which I have cosponsored, to provide incentives to private firms and corporations who will be faced with the very onerous task of meeting antipollution standards and taking antipollution steps during the next few years.

I have personally felt that pollution was one of the greatest problems which face this country. I would place it above many of the other problems, because it affects the health of the Nation. When we have any problem which affects the health of the Nation, we then have something which ought to be one of the top priorities of the Senate.

I am therefore very happy to have supported, and will continue to support at the proper place in the proper bill, an amendment to provide an incentive, a tax credit or an increased tax deduction for

moneys which are invested by firms or corporations in the diminishment of our pollution problems. There are many such companies in the United States, and some of them would be literally put into bankruptcy today if they had to take these steps under our present tax law.

I think the real solution is to provide them with the incentive and the opportunity to do this. I think that then we shall not have to worry so much about what will need to be done later.

I also compliment the distinguished Senator from Maine for his work upon the bill. As is quite often the case, the ranking minority member of the committee is overlooked. In this case, the distinguished junior Senator from Delaware [Mr. BOGGS] has done an outstanding job. He has worked on the bill all the way through. As the distinguished Senator from Maine has said, he is deserving of equal credit for the work that has been done on the bill.

This is a bill which requires an almost infinite amount of time and patience, as the transcripts of the hearings which lie on our desks will show. These two Senators have spent many hours in these hearings to try to come up with a workable bill to solve what to me is one of the most important problems facing this country. Their work is very praiseworthy, and I think it deserves the thanks of the Senate.

I rose to speak this afternoon upon this matter for one reason in particular. On page 15 of the report, and running thereafter to page 18, is a discussion of radioactive pollution.

On June 23 of this year, the Senator from Alaska [Mr. BARTLETT], the junior Senator from Colorado [Mr. DOMINICK], and myself were involved in a colloquy in the Senate with respect to this matter.

I cannot say that I believe that the language of the report contains any direct misstatements. However, I believe that the wording of the language is such that it raises in my mind—as I am sure it will raise in the mind of any casual reader, as distinguished from a

careful reader—the fact that a real problem of radioactive pollution exists in the Colorado River Basin.

I wish to call attention to 2 or 3 statements in the report.

On page 15 appears this statement.

The report established that, in the past, at a period of peak release of contaminants from operating mills, there was a serious problem with regard to the presence of concentrations of radium 226 in the Animas and San Miguel Rivers.

These rivers arise in southwestern Colorado, as everyone knows; and the three words "in the past" are apt to be overlooked.

When this problem arose in 1956, 1957, and 1958, the senior Senator from Colorado was deeply involved in it, and he was deeply involved in the steps that were taken at that time—several changes in mill operations and other measures—to clean up the Colorado River. The important point, in my opinion, is to emphasize and to underscore that this job has been done.

I read from page 16 of the report:

The Counsel for the AEC testified that the AEC could require stabilization of the tailings piles if the pile represented a risk to the public health and safety. The FWPCA testified that the piles did represent such a risk

I do not find the facts in the hearings to be quite in accordance with that statement. For example, Mr. Murray Stein testified before the committee on May 6, and in part he said this:

In 1960, a conference was held on all of the Colorado River Basin at the request of six of the seven States involved, and the Animas River pollution problems were incorporated into this enforcement conference. The Colorado River Basin water quality control enforcement project was then established and included in its work were studies of other sources of radioactive waste discharged to basin streams. The Colorado conference has met in five sessions, and recommendations have been made to abate radioactive and other sources of pollution.

Uranium mill waste discharges have been substantially reduced. This was achieved through the joint efforts and cooperation of the States involved, the Federal water pollution control program, the Atomic Energy

Commission, and the uranium milling industries themselves.

Then he continued:

We believe the control and prevention of radioactive pollution in the Colorado River Basin has been one of the significant success stories in pollution abatement in this country. When we first began to deal with this problem in several areas, the radioactive levels were several times the maximum permissible concentration

Mr. President, this year Colorado passed a water pollution bill which contains several elements. First, it creates a water pollution commission which gives it general supervision over administration and enforcement. Second, it adopts strict water quality standards in accordance with those satisfactory to Federal requirements where interstate streams are involved. Third, it is empowered to accept and allocate loans and grants. Fourth, it is capable of adopting, modifying, and enforcing rules and orders pertaining to water pollution control. Fifth, it may employ, and does employ, technical personnel and hearing officers and others of general responsibility.

Mr. President, I bring this matter up because I believe the Colorado act on water pollution control is one of the best and most forward looking acts in the United States. On several occasions I have paid tribute to the legislature—both Republicans and Democrats—that

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did such an outstanding job on this subject, under the leadership of Governor Love. I believe the Colorado act will constitute a model for good action upon water pollution control from this date forward.

In addition to the quotation of Mr. Stein which I read a few moments ago, I wish to read a few remarks from the statement of Mr. Klashman, who is the regional director of the Federal Water Pollution Control Administration of HEW in Denver. Mr. Klashman said this:

The cooperative industry-Government radioactive pollution abatement program has been eminently successful. Early studies had indicated that the tailings solids were the major source of stream contamination, and hence the industry instituted waste treatment practices that successfully captured and retained these settleable solids. Our surveillance network demonstrates clearly that for all practical purposes surface waters of the entire basin are now free of recent bottom deposits of mill tailings. In addition, where needed, the industry installed additional chemical treatment facilities to remove substantial quantities of radium dissolved in the liquid wastes before release of the latter to the surface streams.

I shall skip a bit and continue with his statement:

In earlier years, also, the industry had been plagued by a series of accidents in which the occasional rupture of earthen tailings pond dikes released large quantities of radioactive wastes to the water environment. Better dike construction and maintenance has essentially solved this problem.

Our surveillance program demonstrates that as a result of this abatement program, the surface waters of the Colorado Basin have for several years contained no more than one-third of the quantity of radium that is regarded as safe. This is a precedent-setting case in which an entire industry has co-operated in reducing pollution to a level sharply below that which has been regarded as acceptable.

Now, Mr. President, I wish to read an order which was issued by Dr. Roy L. Cleere, who is the director of public health, Colorado State Board of Health, pursuant to the act which has been enacted in Colorado.

It is hereby declared to be the order of the Colorado State Board of Health that the owners, operators and other persons or corporations having or claiming to have a legal interest in the premises where tailing piles from uranium or thorium mills are situated, or persons having responsibility for the operation of the mill, submit to the State Department of Public Health within ninety (90) days after the effective date of this regulation a written report setting forth plans and measures employed by them to stabilize such tailing piles and what further plans and measures, if any, are proposed to accomplish the purposes of this regulation.

Then I shall read the actual order as it was put into effect, which was to the effect that these people do exactly

this and report to the health department what they have done along these lines.

It is hereby declared to be the order of the Colorado State Board of Health that the owners, operators and other persons or corporations having or claiming to have a legal interest in the premises where tailing piles from uranium or thorium mills are situated, or persons having responsibility for the operation of the mill, submit to the State Department of Public Health within ninety (90) days after the effective date of this regulation a written report setting forth plans and measures employed by them to stabilize such tailing piles and what further plans and measures if any, are proposed to accomplish the purposes of this regulation.

The effective date of this regulation will be thirty (30) days from and after the date of adoption hereinafter set forth.

Adopted May 9, 1966.

ROY L. CLEERE, M.D., M.P.H.,  
*Secretary, Colorado State Board of Health.*

I shall now take up one other aspect of this matter. I shall not detain the Senate for more than a few minutes, but I believe the record must be made clear.

Dr. Morris, who is the Director of the Division of Operating Safety of the Atomic Energy Commission, said this in the hearings:

We felt that, simply as a matter of good housekeeping prudence in being a good neighbor, we should stabilize that pile and return the land to its natural state.

This refers not to any plant in Colorado but one in Monticello, Utah, and which was operated by the Atomic Energy Commission.

Mr. President, along the same lines, after we had a colloquy on the floor the Senator from Alaska [Mr. BARTLETT] said this:

Mr. BARTLETT. I did not intend to so imply. Obviously, the record is clear that no dangers are to be encountered by anyone at this time. One could go to the Arctic as a tourist, where there has been a peculiar situation in connection with radioactive fallout, and eat caribou meat and there would be no danger at all, or any dire consequences. We are not so sure, yet that the Eskimos, who subsist on caribou meat day in and day out, are not in some danger even now, although several years have passed since tests have been made in the outer atmosphere.

I wish to assure my friend from Colorado

that I am not talking today and shall not talk later as an alarmist. We have mined uranium in the past. We have processed uranium in the past. We are going to continue to do so.

On April 29, 1966, I wrote a letter to Dr. Glenn T. Seaborg, Chairman of the Atomic Energy Commission. Dr. Seaborg's reply to my earlier letter can be found in full on page 14061 of the CONGRESSIONAL RECORD of June 23. I shall not insert it again but I do wish to quote a few paragraphs from his reply. He states as follows:

The FWPCA report, which deals with potential effects of uranium mill tailings on rivers and streams in the Colorado River Basin, states, "there is currently no significant immediate hazard associated with uranium milling activities anywhere in the Colorado River Basin."

I continue with his letter:

However, the report recommends that because of the long half-life of radium-226—the isotope of principal interest in the tailings from a water standpoint—and the uncertainties regarding changes that may occur over centuries in things such as river hydrology and the uses of water, measures should be taken to prevent the erosion, spread and distribution of tailings and that binding agreements should be reached as soon as possible regarding long term public and/or private responsibility for adequate maintenance of the tailing piles.

In concluding the letter he said:

As you know, on May 9, 1966, the State of Colorado Board of Health adopted regulations concerning the handling and disposition of radioactivity-bearing ore materials. The regulations which become effective June 10, 1966, require mill owners to submit to the State of Colorado health authorities within ninety days from that date a written report on measures taken to stabilize tailings piles together with any further actions proposed. We think the approach adopted in the Colorado regulations is a good one.

Please let me know if you would like any further information.

Mr. President, as I have said, I do disagree with one statement in the report, but nevertheless my reason for these remarks basically is to negative anything that the casual reader might get from the report that there is a present danger in the Colorado River Basin from radio-

active water, because this is not the case based upon any standards which we have available to us today with regard to radioactive material.

I yield to the distinguished Senator from Maine.

Mr. MUSKIE. I am delighted that the Senator from Colorado [Mr. ALLOTT] raised this question because it is not my desire or the desire of the subcommittee to create any undue alarm or suggest that there is any immediate problem related to uranium milling activities in the Colorado River.

It might be helpful if I cite two or three statements from the hearing record to put the matter into proper perspective.

For example, on page 3 of the hearing record, Mr. Murray Stein, chief enforcement officer, Federal Water Pollution Control Administration, made this statement:

We believe the control and prevention of radioactive pollution in the Colorado River basin has been one of the significant success stories in pollution abatement in this country

Mr. Stein made this statement on page 5 of the hearing record:

I do not believe that the people in the area are now exposed to immediate health hazard. I think the radiation levels have been reduced materially. Certainly the water, as we will point out, is one-third of the Public Health Service suggested drinking water standards.

On page 37 of the record of the hearings, I made the following statement, raising some questions which I directed to Mr. Stein:

Senator MUSKIE. Now, having listened to all of this, let me pose two or three questions which would seem to me need to be answered before we can develop some policy with respect to this problem.

First of all, do the piles as they exist constitute any hazard to the health of anybody who might be exposed to them—as they stand?

Secondly, is there enough radioactive material in the pile so that if concentrated in any way it would produce a hazard to health?

Three, considering the physical characteristics of the pile, the environment in which it exists, and the erosion dangers which are present, are conditions such that they could lead to concentrations within any reasonable

anticipation of what might happen that would be hazardous to health?

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Mr. Stein's reply, which appears on page 33, was quite extensive. He concluded it with this sentence, which appears on page 39:

I would answer yes to all three of the questions.

The subcommittee found itself in something of a dilemma. The Federal Water Pollution Control Administration obviously was more concerned with the future problem or long-term hazard than were the Atomic Energy Administration representatives. We felt that on the basis of the facts disclosed, relative to the cost of stabilizing the piles in order to reduce any potential hazard, that the piles should have been stabilized.

We thought that the Atomic Energy Commission witnesses were a little careless in their attitude toward the solution of a potential long-term hazard.

But I should like to emphasize again to the Senator from Colorado that no witness before the committee suggested that there was an immediate hazard. The sole question involved was: What should be done in addition to what had been done or had not been done to minimize the possibility of future hazards? It was on that question that we felt it essential to invite the attention of the Senate and the public to the conflict in the attitude of the two agencies; to stimulate minimal action in dealing with the problem. I emphasize again that the committee was and is concerned with "long-term potential hazard."

Mr. ALLOTT. I very much appreciate the remarks of the Senator from Maine. I think that even in this instance it might be reasonable to invite attention to the remarks of Dr. Morris, who in his opinion differed with Mr. Stein. His statement is on page 40, the page following the one from which the Senator from Maine was reading. Dr. Morris was asked by the Senator from Maine about the use of these piles as a child's sand pile. Dr. Morris replied:

I think this allowable averaging applies directly. If the Boy Scouts camped on it for one night, there would be no danger whatsoever.

Senator MUSKIE. How many nights could they camp on it safely?

Dr. MORRIS. We could ask about the boy who slept there every night. My rough calculation shows if one was there 40 hours a week, he would get about four times the annual permissible dose.

Again, this is close to levels for which there is no observable biological effect

So there is a difference of opinion on this subject. I presume that the Senator from Maine has not seen the piles. As they come out finally, they are of very fine sand.

They can be stabilized—not without some difficulty, but stabilization is possible. At this point, I wish to make sure that the condition which the report might imply to a casual reader has been obviated by the steps taken some time since. Second, that any possibility of damage from these piles is now being diminished and done away with by action of the Pollution Control Board of the State of Colorado.

I am very much appreciative of the Senator's remarks but I thought it was important enough that we not leave the impression that the Colorado River Basin—most of which, incidentally, lies outside the State of Colorado, although Colorado supplies most of the water and which extends through all of the Southwestern States—was polluted from a radioactive standpoint.

Mr. MUSKIE. I thank the Senator from Colorado.

Mr. RIBICOFF. Mr. President, water, the vital resource, is much in our thoughts and much in our pronouncements today. But if we are to serve with fidelity the people whom we represent here, in the Senate of the United States, it is not enough that we think about water, or talk about water. We must act, now, to assure that there will be enough water, of adequate quality, to meet the present needs of the people, the growing requirements of the foreseeable future, and the staggering demands of the years to come.



My State of Connecticut, like so many States, owes much to the waters with which she is endowed. Three important river systems traverse Connecticut—the Housatonic, the Thames, and the Connecticut, New England's greatest stream. On the south the State is bounded by the waters of Long Island Sound, and the beneficiary of a beautiful shoreline.

Water turned the wheels of our earliest industry. Our tobacco crop grows in the fertile valley beside the long tidal river. Fish and shellfish are gifts of our waters. Swimming, boating, fishing for sport, and other water-oriented recreation for the people of nearby communities are the prospect—if not always the reality—which abundant water resources have to offer us. And the beauty of the State is enhanced by our streams and lakes and coastal waters.

Water is a gift of nature. It is our responsibility to protect it, to develop it wisely, and to use it well. New England learned long ago about the ravages of floods. We were reminded last year of the devastation of prolonged drought. And we are learning, painfully, about the terrible plunder of pollution. What is more we are doing something about it.

In Connecticut, Governor Dempsey's clean water task force—a panel of distinguished citizens appointed by the Governor last year—recently completed a study of the water pollution problem. Their recommendations—which have the strong endorsement of Governor Dempsey—will provide an even stronger and more vigorous State program to combat water pollution. In one major recommendation, the task force has proposed a \$150 million bond issue to provide a program of State grants to municipalities for sewage treatment facilities. I am confident that this program will have the support of the Connecticut legislature next year.

The task force also urged the passage of the bill we are discussing today, and gave strong support to a program of tax incentives for the construction of pollution abatement facilities by industry. So

we are moving forward. And S. 2947, the Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966, offers sound solutions to the critical domestic problem of water pollution now, at last, faced squarely and met head on with the weapons of new knowledge, more money, and stronger authority.

The Committee on Public Works and its Subcommittee on Air and Water Pollution, under the leadership of the Senator from West Virginia [Mr. RANDOLPH] and the Senator from Maine [Mr. MUSKIE], has come forward again with sound legislation after a difficult assignment. I am proud to join in sponsoring S. 2947 and urge its speedy enactment into law.

S. 2947 is a bold bill. It is bold in its call for an outlay of \$5 billion in 6 years as the Federal contribution to the estimated \$20 billion nationwide need for waste treatment works construction. It is bold in its call for the removal of restrictions on Federal assistance, which hamper the construction of some of the most critically needed projects. It is bold in its call for a special effort to develop advanced waste treatment for the joint treatment of municipal wastes and industrial wastes. It is bold in its call for new enforcement authorities to assure that the conference is armed with the information it needs on which to base a workable, fair program of remedial action. Enforcement is crucial to a successful water pollution control program.

Federal enforcement has laid the groundwork for the cleanup of difficult, longstanding problems of the Connecticut River, and I am convinced of its worth.

S. 2947 is a sound bill. It is the product of the exhaustive subcommittee hearings in Washington and around the Nation last year, of this year's thorough hearings on water pollution control legislation, and of conscientious bipartisan committee deliberations. It provides the mechanism for the river basins approach to water pollution control proposed by the President, while building on the solid

foundation of present law so that no momentum will be lost in the great nationwide attack on the defilement of America's waters.

With the passage of the Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966, we will serve the people well.

Mr. KENNEDY of New York. Mr. President, I welcome this opportunity to vote today for S. 2947, a bill amending the Federal Water Pollution Control Act.

By providing for the first time Federal assistance on a scale necessary to meet present antipollution needs, and by eliminating dollar ceilings on sewage treatment plant construction grants, this bill is a major step in our drive to reduce and eliminate water pollution. I am glad to join Senator MUSKIE in cosponsoring this measure and urge my colleagues to support it today.

This bill authorizes Federal matching grants for sewage treatment plant construction that total \$6 billion over the next 6 years. It raises the annual Federal contribution to \$1½ billion a year by 1971 in contrast to the \$150 million that would be authorized for the current year. Although this may seem to be a rapid growth, anything less would be inadequate for the job. It has been esti-

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mated that there is a backlog of sewage treatment construction needs of about \$30 billion. The Federal share of this program, under the existing 30-percent to 50-percent matching formula, is somewhere between \$10 and \$15 billion. At the current level of Federal funding, \$150 million a year, it would take 100 years to meet our current backlog alone. It is no wonder that cities and towns are impatient at the delay they currently face in attempting to get Federal assistance for their projects.

In addition, by the year 2000, our population is expected to grow by at least a third to a figure in excess of 300 million. This additional sewage treatment need not have been included in the estimated

backlog and must be added to the total. Seen in this context, a Federal program of \$1½ billion a year takes on a different cast.

This bill also corrects a major limitation in existing legislation by removing the restrictions on sewage treatment grants. The existing grant programs discriminated against cities because their construction costs far exceeded the limitations of \$4.8 million per project. New York City, for example, is planning the North River treatment plant which is now estimated to cost \$60 million. The cost of a new sewage treatment plant in Buffalo has been estimated to cost more than \$30 million.

Inadequate sewage treatment by a major city can thoroughly pollute a river and ruin the pollution control efforts of smaller neighboring communities. Under this bill, our cities will qualify for Federal assistance and we will be able to make progress in restoring the quality of our waterways.

By providing Federal assistance to our cities for sewage treatment plant construction, Federal, and State Governments can also urge that new construction meet water quality regulations. For example, New York City's North River treatment plant, now in the planning stage, is being designed as an intermediate quality plant that would remove only 55 percent to 60 percent of the active pollutants of the sewage it will handle. This plant is estimated to cost \$60 million.

However, New York State and New Jersey have agreed with Secretary Gardner that new sewage treatment plants on the Hudson River should provide secondary treatment that would remove 85 percent to 90 percent of these pollutants. A North River plant designed in this fashion would cost about \$100 million. The Federal Government would absorb almost all of the additional cost of additional treatment, if this bill is passed. This would make a major difference in the quality of the water in the Hudson. I urge New York City to design this plant

so that it will provide secondary treatment—for with this legislation the Federal Government can help.

Another major feature of this legislation is a provision that permits States and communities to prefinance the Federal share of sewage treatment construction projects. This provision states that all projects meeting Federal standards that are started after July 1, 1966, will qualify for Federal grants when funds are available. This provision does not guarantee that the funds will be available. But it does guarantee that a community and a State will not lose Federal funds because they act now. This provision is of major importance to those States, such as New York, that have offered to assist local communities in financing their new construction.

The bill also establishes a Federal loan fund to assist local communities in meeting their share of new project costs. This eliminates major financial barriers to a successful municipal sewage treatment program.

I am also pleased that this legislation incorporates Senator TYDINGS' bill, S. 3240, requiring a study of the importance of our salt marshes and estuaries and the effects of water pollution on these areas.

I cosponsored Senator TYDINGS' original bill because of my concern over the continuing destruction of our marshland and the related effect on our fisheries and wildlife.

The Atlantic States Marine Fisheries Commission pointed out in its most recent report that at least 70,000 acres of coastal marshland along the Atlantic Coast has been destroyed in the last 10 years. The President's Science Advisory Commission has also pointed out that 60 percent of the seafood taken from water surrounding the United States is dependent on coastal estuaries and marshland for their existence. If we destroy our wetlands, we will destroy our fisheries so that oysters, flounder, and fluke either disappear or become rare.

I have introduced a bill in the Senate

aimed at the preservation of 16,000 acres of marshland on Long Island's south shore. This bill, S. 3271, may well provide a pattern for cooperative local-State-Federal protection of marshland. But we also need to know what pollutants threaten these marshlands and estuaries. We need to know which areas are now in danger. The provision of the bill authorizing \$1 million for a study of our estuaries and marshland is therefore an important provision.

This legislation also speeds up the Federal research program on water pollution problems. Imaginative research may provide new answers to our sewage disposal problems, answers that can save large amounts of money. Economical closed-system waste disposal units for individual houses may make it possible to eliminate collecting sewers and treatment plants in new communities. New chemical processes may reduce the cost of municipal sewage treatment plants. And an emphasis on pollution-free industrial processes may make it possible materially to reduce industrial pollution.

Important as this legislation is, there are several problems that it does not answer. It does not meet our lateral sewer needs. We now provide some funds for this purpose under the community facilities program of the Department of Housing and Urban Development. But a single county growing in population may need lateral sewers costing \$5 to \$10 million. The largest grant for lateral sewers that HUD has given for this purpose is \$1½ million. The Community Facilities Administrator reports that as of June 23, 1966 it has received 4,033 inquiries about grants that total \$2,352,000,000. Their total authorization is \$100 million. This is a gap that we need to close.

We also have not yet met the problem of industrial pollution. We can only enforce water quality standards if we can help industries absorb the costs of treatment. It is easier, for example, to require that a new plant be built so that it does not violate local water quality

standards. But it is harder to require an existing plant to maintain standards at a cost which may drive it out of business.

The new river basin approach authorized in this bill makes it possible to provide tax credits to existing plants that install new treatment facilities, river basin by river basin. In those river basins where the local communities are providing effective municipal treatment and water quality standards are enforced, it might be possible to grant tax credits to those industries willing to install new treatment facilities on existing plants.

We also need thoroughly to explore the possibility of building pollution treatment plants to service a number of industries, with payments by the industry according to the amount of pollution it discharges. This approach will be studied with research funds provided in this bill. Both this approach and the one discussed earlier deserve careful study.

In closing, I wish to compliment Chairman MUSKIE and his colleagues on the Subcommittee on Air and Water Pollution. They have reported a strong bill which I am glad to support.

Mr. MURPHY. Mr. President, once again the Senate Public Works Subcommittee on Air and Water Pollution, on which I have the privilege to serve under the able leadership of Senator MUSKIE and Senator BOGGS, has brought before the Senate a most important and far-reaching bill designed to further this Nation's battle against water pollution.

Fighting pollution, whether it be air or water pollution, is not an easy task, but not to take action where action is so clearly called for would be a dereliction of duty by Congress and a disservice to all Americans. Pollution is one of the great domestic issues facing our Nation, and it is a problem that increasingly plagues more and more of our communities and endangers the Nation's health. Because of my interest in and concern with the water pollution problem in this country, I was pleased to cosponsor S. 2947, which is before the Senate today.

The scarcity of water has tormented man down through many centuries. Today our water needs are great and growing. Tomorrow the demands for adequate water to supply industry and agriculture for our exploding population will be even greater. The world demand is expected to double before the end of the 20th century. It has been estimated that by 1980 water supplies in the United States will be inadequate to meet the water requirements of our population.

Scientists tell us that the earth's original supply of water is still in use. Little has been lost or added. The centuries-old hydrologic cycles of water continue

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today. It is therefore not the total world supply that is of concern to man but its management and distribution that will determine whether adequate water will be available.

The history of my State, Mr. President, shows a strong link between the development of the State and the development of its water resources. So we in California have long appreciated this problem and the 240-mile-long aqueduct canal in Los Angeles is just one of many examples of California's effort to overcome the unequal distribution of water.

Last year, Congress enacted important legislation designed to alleviate the water pollution control and abatement problem. Important as this action was, evidence gathered from hearings held in California and across the country by the Air and Water Pollution Subcommittee indicated that we are not doing enough and that greater effort is needed to deal with this most serious national problem.

As a result of these hearings, the subcommittee made recommendations to further attack the water problem, and many of these recommendations are incorporated in S. 2947. Our subcommittee found that greater Federal assistance was needed to meet the costs of municipal sewage treatment construction between now and 1972. S. 2947 would help to answer the dire need of

the many communities across the Nation by authorizing a 6-year Federal program of sewage treatment construction grants. As costly as this program would be, I am convinced it is necessary for the health, welfare, and future growth of the country.

We in the West have always been keenly aware that water is a critically important resource. The shortage experienced by the northeast section of our country last year has served to underscore the fact that the water problem is national in scope, that it must be faced, and faced now.

That is why I feel that there is no more important subject than that of water. As the major substance of all living things, water is truly an extraordinary substance. It is essential for the transportation of man's commerce, for providing man with essential power for irrigation of his farms and, yes, for the sustaining of life itself.

The poet Byron once said:

Til taught by pain, men really know not  
what good water is worth.

It is the duty of the Congress, the States, the local communities, and industry to see if the "pain" of inadequate water supplies can be avoided by proper and prudent planning.

The passage of S. 2947 today, Mr. President, will contribute to that end. Enactment of S. 2947 will again underscore the determination of the American people and of the Congress that the by-products of modern society will not be permitted to despoil our natural resources, and that the genius and reasonableness of man will enable us to overcome the pollution problem, thus permitting our citizens to enjoy these precious natural resources.

Mr. McINTYRE. Mr. President, I would like to congratulate the Senator from Maine [Mr. MUSKIE], for the effective manner in which he has managed the bill now before the Senate.

This bill represents a further recognition by the Senate of the tremendous

need for financial assistance to communities which are trying to clean up their own water pollution. The job of cleaning up our Nation's rivers must be accelerated; and this can be done only through additional Federal and State financial help. Our cities cannot be left to bear the full cost of these expensive treatment facilities which are of benefit to entire regions.

My State of New Hampshire contains the headwaters of six interstate river basins. We know firsthand the expense of installing municipal treatment plants. Under our Governor, John W. King, New Hampshire has played a leading role among the States in financial support to municipalities for controlling water pollution. Our New Hampshire communities are looking forward to the additional funds for which their State's efforts have qualified them.

The PRESIDING OFFICER. The bill, having been read the third time, the question is, Shall it pass?

On this question the yeas and nays have been ordered; and the clerk will call the roll.

The legislative clerk called the roll.

Mr. LONG of Louisiana. I announce that the Senator from Tennessee [Mr. BASS], the Senator from Alaska [Mr. GRUENING], and the Senator from Arizona [Mr. HAYDEN] are absent on official business.

I also announce that the Senator from New Mexico [Mr. ANDERSON], the Senator from Pennsylvania [Mr. CLARK], the Senator from Wyoming [Mr. MCGEE], the Senator from Virginia [Mr. ROBERTSON], and the Senator from Florida [Mr. SMATHERS] are necessarily absent.

I further announce that, if present and voting, the Senator from Tennessee [Mr. BASS], the Senator from Pennsylvania [Mr. CLARK], the Senator from Alaska [Mr. GRUENING], the Senator from Arizona [Mr. HAYDEN], the Senator from Wyoming [Mr. MCGEE], the Senator from Virginia [Mr. ROBERTSON], and the Senator from Florida [Mr. SMATHERS] would each vote "yea."

Mr. KUCHEL. I announce that the Senator from Pennsylvania [Mr. SCOTT] is absent because of illness and, if present and voting, would vote "yea."

The Senator from Wyoming [Mr. SIMPSON] is detained on official business, and, if present and voting, would vote "yea."

The result was announced—yeas 90, nays 0, as follows:

\* \* \* \* \*

So the bill (S. 2947) was passed.

Mr. MANSFIELD. Mr. President, by unanimously agreeing to expand the Government's attack on water pollution, the Senate accorded the distinguished Senator from Maine [Mr. MUSKIE] an outstanding tribute. I barely need add that the tribute was highly deserved. I join with the many Senators who commended Senator MUSKIE for the exceptional manner in which he brought this measure to its successful disposition. In committee and on the floor of the Senate today, his strong support, his clear, convincing advocacy, and his effective leadership assured the Senate's overwhelming approval.

Furthermore, with the passage of the clean air measure yesterday, followed by the antiwater pollution proposal today, Senator MUSKIE has indeed brought great distinction to his Air and Water Pollution Subcommittee. Clearly, all Americans are deeply grateful for his singular devotion to the solution of this

grave and most significant problem.

So, too, has the ranking minority member of the subcommittee, the distinguished junior Senator from Delaware [Mr. BOGGS], devoted his great talent and energy to this problem. And of course he must share the credit for today's success. His vigorous support was essential to this outstanding victory.

The chairman of the Committee on Public Works, the distinguished Senator from West Virginia [Mr. RANDOLPH], similarly is to be commended for his strong and articulate advocacy. Long a supporter of effective legislation in this vital area, his backing today served immensely to achieve an overwhelming endorsement. The Senator from Kentucky [Mr. COOPER] and the Senator from Massachusetts [Mr. KENNEDY] likewise contributed to the success both with outstanding support and gracious cooperation. The same may be said of the Senator from Alaska [Mr. BARTLETT], the Senator from New York [Mr. JAVITS], the Senator from Wisconsin [Mr. NELSON], the Senator from Texas [Mr. YARBOROUGH], and other Senators who joined to assure unanimous passage.

Once again, I wish to praise Senator MUSKIE and his subcommittee for a job

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well done. Moreover, I praise the entire Senate. The achievement is surely a great tribute to this body.

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**1.2j(4)(b) Sept. 30: Considered and passed House, pp. 24546-24547, 24592-24619, 24622-24624, 24629**

#### WATER POLLUTION CONTROL

Mr. SISK. Mr. Speaker, by direction of the Committee on Rules, I call up House Resolution 1026, and ask for its immediate consideration.

The Clerk read the resolution, as follows:

H. Res. 1026

*Resolved*, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 16076) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such Act. After general debate, which shall

be confined to the bill and shall continue not to exceed two hours, to be equally divided and controlled by the chairman and ranking minority member of the Committee on Public Works, the bill shall be read for amendment under the five-minute rule. It shall be in order to consider the committee amendment in the nature of a substitute now printed in the bill and such substitute for the purpose of amendment shall be considered under the five-minute rule as an original bill. At the conclusion of such consideration the Committee shall rise and report the bill to the House with such amendments as may have been adopted, and any Member may demand a separate vote in the House on any of the amendments adopted in the Committee of the Whole to the bill or committee amendment in the nature of a substitute. The pre-

vious question shall be considered as ordered on the bill and amendments thereto to final passage without intervening motion except one motion to recommit with or without instructions. After the passage of H R 16076, the Committee on Public Works shall be discharged from the further consideration of the bill (S. 2947), and it shall then be in order in the House to move to strike out all after the enacting clause of the said Senate bill and insert in lieu thereof the provisions contained in H R. 16076 as passed by the House.

The SPEAKER. The gentleman from California [Mr. SISK] is recognized for 1 hour.

Mr. SISK. Mr. Speaker, I yield the gentleman from California [Mr. SMITH] 30 minutes, and pending that I yield myself such time as I may consume.

Mr. Speaker, the resolution is self-explanatory. It provides for the Committee on Public Works to consider in the Committee of the Whole a matter which is of vast importance to our country dealing with water pollution.

Mr. Speaker, I urge the adoption of the resolution.

Mr. Speaker, I reserve the balance of my time.

Mr. SMITH of California. Mr. Speaker, I concur in the statement just made by the gentleman from California [Mr. SISK].

Mr. Speaker, I urge the adoption of the rule. The purposes of the bill are First, to authorize appropriations of \$2,450 million for construction grants for the 5 fiscal years 1967 through 1971 to be used to construct sewage treatment plants; second, to change the grant formulas under which Federal aid is made available to give further incentive to States and local governments; and, third to provide \$228 million for research grants through June 30, 1969.

The original administration bill provided for unlimited funding through 1971; the Senate-passed bill, S. 2947, provides for authorizations of \$6 billion over the same period. The revised administration bill calls for \$3,450 million. The committee-reported bill is the smallest of all.

The authorization for construction grants, totaling \$2.45 billion over the next 5 years is broken down as follows:

	<i>Million</i>
Fiscal year 1967	\$15
Fiscal year 1968	30
Fiscal year 1969	40
Fiscal year 1970	65
Fiscal year 1971	95

The grant formula and provisions governing maximum amounts available for individual projects have been substantially modified. The current dollar limitation on grants to small projects is doubled from \$1.2 million to \$2.4 million. For projects serving two or more communities, the ceiling increase is from \$4.8 million to \$9.6 million.

The Federal share of such individual project grants is increased from the current 30 percent to 40 percent if the State involved makes a contribution of 30 percent. If a project is part of an approved basin plan it, too, is eligible for an additional 10-percent incentive grant above the 30-percent figure, with no dollar limitation. This may again be increased another 10 percent, to 50 percent, if the States agree to contribute 25 percent for all projects under the approved basin plan.

To be eligible for basin plan grants, a plan must be submitted to the Secretary of the Interior and approved. If the basin is within a State, the Governor must submit it; if submitted by a group

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of States, a majority of the Governors must support it.

If an interstate agency, the Upper Colorado and Columbia Basins or the Tennessee and Delaware River Basins submit a plan, provisions are outlined for the required areawide support for such plan.

The Secretary of the Interior is authorized to pay up to 50 percent of the administrative expenses incurred by planning agencies in preparing basin pollution control and abatement plans.

Research programs are authorized to be funded to \$228 million for fiscal years

1967 through 1969, or about \$76 million per year. At least 25 percent is to be used for the industrial pollution studies in each year.

A study is authorized by the bill, to be undertaken by the Secretary, in cooperation with pollution agencies, of the estimated costs of an adequate 3-year Federal antipollution program beginning July 1, 1968. Such report must be submitted to the Congress by January 10, 1968.

The bill increases the authorization for planning grants to States and interstate agencies to assist them in meeting the costs of maintaining prevention and control measures. The increase is from \$5 million through 1968 to \$10 million for each of fiscal years 1968 and 1969.

Reimbursement is authorized for expenditures made in advance of granted funds if the Secretary approves the project prior to the beginning of construction.

The bill has administration support.

There are supplementary and additional views filed with the report.

Seven majority members support the bill but feel that it falls far short of what is needed; they favor enactment of the Senate bill—\$6 billion. They say the waters of America are so polluted that no effort to reduce and eliminate the problem can be spared. They see the House bill as substantial progress, but not as much as the Senate.

Additional views are submitted by nine minority members. They point out that title II of the bill, entitled "Clean Rivers Restoration Program" is actually a new name for the expansion of the existing Federal program of grants for construction of municipal sewage treatment plants.

They also note that title I, while a great improvement over the proposal of the administration, does not provide for the construction of industrial waste treatment facilities, or for the prevention or control of agricultural pollution, or for the removal of sludge from river bottoms.

They support the concept of basin planning but note that the remainder of the bill is primarily a sewage construction-grant bill which will not produce "clean rivers" because of the many pollution problems left untouched. They support the committee position with respect to the amount of the authorization.

Mr. SISK. Mr. Speaker, I move the previous question.

The previous question was ordered.

The resolution was agreed to.

A motion to reconsider was laid on the table.

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Mr. BLATNIK. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 16076) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act.

The motion was agreed to.

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill, H.R. 16076, with Mr. HANSEN of Iowa in the chair.

The Clerk read the title of the bill.

By unanimous consent, the first reading of the bill was dispensed with.

The CHAIRMAN. Under the rule, the gentleman from Minnesota [Mr. BLATNIK] will be recognized for 1 hour and the gentleman from Florida [Mr. CRAMER] will be recognized for 1 hour.

The Chair recognizes the gentleman from Minnesota [Mr. BLATNIK].

Mr. BLATNIK. Mr. Chairman, I yield to the chairman of the full Committee of Public Works, the gentleman from Maryland [Mr. FALLON] such time as he desires.

Mr. FALLON. Mr. Chairman, I rise in support of H.R. 16076, the Federal Water Pollution Control Act of 1966, which we reported unanimously by the Committee



on Public Works.

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I have stated before and I reiterate that statement on this floor that today one of the greatest domestic problems facing the Nation is the cleaning up as rapidly as possible of our Nation's polluted rivers, lakes, and streams.

President Kennedy stated it succinctly:

The pollution of our water has reached the proportions of a national disgrace. It endangers our health. It limits our business opportunities. It destroys recreation.

Water use is increasing tremendously. Since 1900, while our population has tripled and continues to increase, fresh water use has jumped eightfold. Agricultural, industrial, and recreational water use has increased tremendously. By 1980, water needs will be 600 billion gallons a day—almost twice the present usage and about equal to the total supply on which the continued growth and continued prosperity of this Nation depends.

While water use on a large scale is already a necessity, greater reuse is inevitable. More than 100 million Americans get their drinking water from rivers carrying sewage, industrial wastes, and anything else that can be flushed down a sewer or thrown from a bridge. At the same time that municipalities and industries need more clean water, they are fouling their own water supplies with their own wastes.

Water is industry's most valuable raw material and by 1980 it will require twice as much as today. Water recreation has grown enormously during recent years as the leisure time and income of the American people has increased. They need this recreation outlet, yet each year more bathing beaches and water sports areas are closed because of pollution. The story is the same with sports fishing. Each year the number of pollution-caused fish kills grows higher.

There is only one conclusion: This Nation is faced with a very critical problem of water pollution. The Committee on

Public Works has been aware of this problem for a number of years. In 1956 from the committee came the first real strong Federal Water Pollution Act. That act subsequently has been implemented by legislation reported by the committee in 1961 and in 1965. All this legislation is now on the statute books of our Nation. It has proved to be an effective tool in the fight against the blight of our Nation's waters.

H.R. 16076 is one further step in the effort that must be made to clean up our waters. It envisions a full-scale Federal, State, and local partnership to bring about the completion of the task that is before us. It contains increased authorizations for funds to provide proper sewage-treatment facilities. There is additional funding for research in all the forms that are needed to help solve the many problems created by the pollution of our streams, lakes, and rivers. It would make an effort to bring about a cleanup of our waters on a basinwide approach. It is good legislation. It is needed legislation.

We have hardly been able to hold our own against the rising tide of pollution. Our efforts to control pollution must be geared to more speed than the force which produces it—a swiftly growing population, and an expanding urban, industrial society.

H.R. 16076 meshes in with this approach and it is a bill every Member of this House can be proud to support.

Mr. BLATNIK. Mr. Chairman, I yield myself such time as I may require.

Mr. Chairman, last year the Congress and the Nation took a great step forward when we enacted the Water Quality Act of 1965 which authorized the establishment of water quality standards on all the country's interstate rivers, lakes, and coastal waters. This act represents the first effort in the history of this Nation to attack the problem of water pollution on an entire river basis. It recognized the State's primary role in this field, by requiring the States to establish adequate water quality criteria applicable to

interstate waters by June 30, 1967. The States water quality criteria plus the plan for enforcement will, when approved by the Secretary of the Interior, be the water quality standards for each waterway. All 50 States have filed with the Secretary of the Interior letters of intent to establish such vital standards of water quality.

Public opinion has clearly helped stem the tide against pollution. The Nation has been shocked into an awareness of the problem. Dedicated men and women in every State are determined that our great rivers and lakes will be cleansed and no longer used as cheap conveyors of municipal and industrial wastes. America now understands that our waterways no longer have the capacity to absorb the unwanted pollutants.

This contagious awareness of people everywhere has meant action and the President this year submitted new proposals designed to commit on a larger scale the resources of the Federal Government to the development of an adequate program designed "to clean and preserve entire river basins from their sources to their mouths." The administration sent to the Congress early this year a proposal which would attack the problems of pollution control on a river basin basis, but it did not extend and improve the present provisions of the Federal Water Pollution Control Act. In the other body, the Senator from Maine [Mr. MUSKIE] introduced S. 2947 which was cosponsored by 49 other Senators. Under the Senator's able leadership, S. 2947 passed the Senate by a vote of 90 to 0.

The bill (H.R. 16076) before you today combines the best features of the administration bill and the Senate passed bill.

It was reported by your committee unanimously. The great interest of the chairman of the committee, the gentleman from Maryland [Mr. FALLON], the hard work and untiring efforts of members of the committee of both parties, and particularly that of Congressman

ROBERT JONES, of Alabama, have been of immeasurable assistance in the development of this important and vital bill which we have reported. A little later in these remarks I will review the provisions of the bill and briefly discuss the principal provisions.

Undoubtedly, the most critical domestic problem facing this country today with its wondrous resources is the problem of adequate supplies of water that is capable of use for all our domestic needs. It is a gigantic problem, because, until only recently, we have neglected, and even refused, to meet head on the problem of preventing the pollution of our waterways. Now we are confronted with the need to accelerate our efforts and shift into high gear, but not on a crash basis. We no longer can afford the luxury of allowing our wastes to flow untreated into our rivers, lakes, and coastal waters. We must begin now with imagination and vigor to take great strides not in words, but in deeds.

While water resources vary in different parts of the country, the United States as a whole is richly endowed with fresh water. But in this day and age, quantity cannot be considered apart from quality. We not only need large amounts of water to maintain our industrial-urban-agricultural economy, we need large quantities of usable water.

Fortunately, a grave shortage of water in this country is not inevitable, if we take appropriate steps to forestall it. There are three known means of increasing the amount of usable water.

One is the desalting of sea water, a development already in the large-scale pilot stage and destined for volume application in the not too distant future.

Another is artificial precipitation. Here again we are making great strides, but more research is needed before we can claim victory.

The third and most promising means of increasing our supply is through the reuse and recycling of existing water supplies.

Through effective pollution control,

water can be used over and over again on its way to the sea. This we know. It is, to an extent, happening today. It is the course that we must pursue in the future with increasing intensity—building on past experience, taking full advantage of new knowledge as it develops. There is virtually no limit to the amount of usable water that can be created through the removal of wastes.

At the same time, it must be recognized that taking advantage of the water-creating potentials of pollution control is by no means easy. No longer are we dealing primarily with the simpler forms of organic wastes. We are dealing with an almost endless variety of wastes produced by a burgeoning technology. And we are dealing with wastes produced in volumes hardly envisioned a few years ago.

One of the most difficult and increasingly critical problems which must be met in water pollution control is the increased concentration of population and industry in and around urban centers. As these great urban-industrial complexes grow and merge, water pollution problems also grow and merge. By 1980 it is estimated that about 70 percent of our people will be concentrated in the cities and their suburbs. Joining in this rush into the urban area, or being encompassed by its growth, will be a large segment of industry. Thus, we can look

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forward to the development of larger metropolitan complexes than we have today. Some demographers foresee vast supercities that will stretch hundreds of miles along our coasts and the Great Lakes, and to linear cities that will line all the great rivers and major highways. The water pollution problems such metropolitan complexes will cause staggers the imagination.

The tasks of collecting and treating the wastes from today's larger cities is already taxing our engineering and scientific knowledge. The concentrations of population and industry within

our large cities produce vast quantities of complex wastes which often must be discharged into a single, and usually limited watercourse. Even when the best of today's waste treatment is applied, the sheer amount of the treated effluent causes serious pollution problems in the receiving streams.

The municipal waste treatment processes in use today were designed for the wastes and problems of 40 and more years ago. No essentially new or more effective processes have been developed. These conventional methods of sewage treatment will continue to be useful for many smaller cities for some time, but for the larger cities they are proving to be entirely inadequate. The volume, potency, and complexity of future municipal wastes can only result in the discharge of even larger and larger amounts of impurities into badly needed water resources if we continue to limit ourselves to apply presently known treatment processes.

From 1900 to 1960, industrial production as a whole increased by 800 percent but, in this same period, organic industrial pollution—of animal or vegetable origin such as meatpacking, food processing, paper, textiles—increased by 1,000 percent. The 1960 industrial waste production is expected to be doubled by 1980.

In addition to organic wastes, industry discharges large amounts of inorganic wastes—principally of mineral and chemical origin—resulting from the mining, processing, and manufacture of a wide variety of mineral, metal, and chemical products. In recent years, radioactive wastes have been of special concern.

A major new pollution problem has emerged with the growth of the synthetic chemical industry. This industry has grown so rapidly, and the number of new products it introduces annually, that relatively little is known of the pollutional characteristics of its products and wastes, including their toxicity to aquatic life, animals, and man. We do

know that synthetic chemical products and wastes are very complex in composition and behavior, and are extremely stable and persistent in the water environment. We also know that many of these synthetic chemicals interfere with present-day water and waste treatment processes, making them less effective in removing the common pollutants while they are relatively unaffected by such treatments.

A third major source of water pollution is land drainage from both rural and urban areas. Pollution from rural land drainage has increased in recent years as a result of an increase in the use of agricultural pesticides and fertilizers, in irrigated agricultural practices, and in specialized farming having associate feedlots and facilities for beef raising, dairy farming, and poultry raising. In certain areas, natural salt deposits are an important source of pollution.

Another and increasing problem of land drainage water pollution is resulting from urban population and economic growth. Each year additional millions of acres of land are withdrawn for use for streets, highways, airports, housing, and other buildings. The runoff from these hard-surfaced areas is nearly 100 percent and will if all of the accumulated deposits—oils, organic matter, trash, soil, and industrial dusts, other air pollutants, fertilizers, and pesticides used by weekend horticulturists, and whatever else can be hydraulically washed into a catch basin or nearby stream.

In addition, municipalities with combined sewers are by-passing increasing amounts of storm water sewage as hard-surfaced areas and populations are increased. Only recently have pollution control agencies looked into the matter of urban land drainage and have found its pollution potential to be highly significant. A great deal of study of this important and growing problem is needed.

Water pollution is many problems—and it is a national problem. Water pol-

lution control calls for action at all levels of government and by industry.

H. R. 16076, as reported from the House Committee on Public Works, provides a realistic and positive approach to water pollution control. Its provisions will help all our cities and municipalities to attain the goal of clean, pure water.

First. The bill extends the authorization for grants to build needed waste treatment plants to June 30, 1971. This authority is due to expire on June 30, 1967. Since 1956 the 7,051 grants have been made for projects costing a total of \$3,793 billion. The Federal share of these projects was \$803.4 million. Clearly this program has been successful and should be extended.

Second. The bill doubles the present dollar ceilings on construction grants for waste treatment works from \$1.2 million to \$2.4 million for a single project, and from \$4.8 million to \$9.6 million for a joint project serving two or more communities. The present 30-percent limitation remains the same, except that the bill provides a further incentive if the States participate in the project costs. The bill authorizes the Secretary to waive the increased dollar limitations and to pay up to 40 percent of the estimated reasonable construction costs of the project, if the State will pay 30 percent of the project costs.

Third. The bill authorizes a new approach to the problem of water pollution control as a logical extension of the Water Quality Act of 1965. The new clean rivers restoration program is oriented to controlling pollution on a basin basis.

Under this program the one or more Governors of an interstate agency in close cooperation with local communities, will develop pollution control and abatement basin plans. The plan will include, among other things, recommendations for the type and location of treatment works and the necessary steps to maintain and improve the quality of the waters consistent with applicable water quality standards. The bill provides

that the Secretary may pay up to one-half of the planning costs. Once completed, the plan must be approved by the Secretary of the Interior and the Congress.

As an incentive to encourage the States and local communities to initiate basin planning, the bill authorizes up to 40 percent grants for the construction of waste treatment works without any dollar limits. In addition, this percentage can be increased to 50 percent if the States pay 25 percent of the project costs.

Originally, the administration proposed that the clean rivers program include a "one shot" financing scheme designed to shift the entire burden on local and State governments after the initial Federal grant. Your committee rejected this concept as unsound.

Fourth. The bill removes the present \$5 million ceiling on research and authorizes up to \$75 million for 3 fiscal years for all research and for research and demonstration grants. In addition, it authorizes grants to industry for research and demonstration projects that have industry-wide application.

Fifth. The bill provides for reimbursement to local communities, such as those in New York State, that initiate construction on approvable projects for which Federal funds were not available.

Sixth. The bill provides for the transfer of the Administration of the Oil Pollution Act of 1924 from the Secretary of the Army to the Secretary of the Interior.

Seventh. The bill authorizes a total appropriation for construction grants of \$2.3 billion over 4 fiscal years beginning July 1, 1967.

This is \$1 billion less than that authorized by the administration over 5 years. The bill also directs the Secretary of the Interior to develop and submit to the Congress by January 10, 1963, a cost estimate study. If the study reveals that larger amounts are needed before the end of fiscal year 1971, appropriate increases in future legislation can be made.

Let me discuss some of the provisions

in H.R. 16076 in a little more detail.

The bill provides for two significant changes in the existing grant program, both of which should add to the effectiveness of the construction grant program.

The first is the doubling of the present dollar limitation on projects. The bill would make the maximum grants \$2.4 million for an individual treatment plant and \$9.6 million for a combined project.

Under present law the grants to this type of project cannot exceed 30 percent, and the dollar limitations come into play only when these limitations are less than 30 percent of the project cost. These dollar limitations can now be removed if the State agrees to contribute 30 percent

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to all projects in the State receiving grants from the same allocation.

The second significant change is the provision for permitting an increase in the Federal contribution from 30 to 40 percent if the State contributes 30 percent. The provision removing the dollar limitations would be retained as in existing law.

If there is no State contribution, a project which costs \$10 million could, under the bill, receive a maximum of \$2.4 million. The community would have to pay \$7.6 million.

If there is a State contribution of 30 percent for a \$10 million project, the Federal contribution would be \$4 million, and the State \$3 million, leaving the local community only \$3 million to pay. This will bring in many of the less prosperous cities which might not be able to raise sufficient revenue for the larger amounts.

We recognized the difficulties larger cities have in obtaining adequate Federal grants in the construction of their treatment facilities. The modification offered here will provide real assistance to many cities.

The introduction of the concept of an approved basin plan for incentive grants under title II, clean rivers restoration plan, is new in the field of water pollu-

tion. If a project is part of an approved plan for water pollution control and abatement in a river basin or in coastal waters, bays, lakes, or part thereof, it is eligible for an incentive grant. State approval of priorities is applicable, as in existing law.

The incentive grant amounts to 40 percent which is equivalent to 10 percent above the basic 30-percent grant provided in existing law.

There is no dollar limitation. The grant may be increased by another 10 percent, making a total of 50 percent, if the State agrees to contribute 25 percent for all projects for which Federal grants are made under this program for the same allocation.

In this case, the State matching requirement has been reduced to 25 percent so that the balance to be contributed by local communities would also be 25 percent.

Twelve States are now offering financial assistance to municipalities in construction of treatment facilities. In some instances this assistance is offered on a yearly continuing basis, and in one instance in the form of a payment based on a percentage of the original project cost but offered as a means of assisting in the financing of operation. The objective seems to be twofold: to provide State assistance at lower annual cost to the State and without the necessity for a large bonding issue and to assure continued good operation of the facilities. Such an approach is considered as acceptable as State financial assistance as long as the project cost to the State is equivalent to 30 percent of the original project cost.

The use of the term "basin" does not mean to imply that the plan as developed should be only for the large river basins or coastal areas, such as the Missouri and Ohio Rivers, the gulf coast, or one or more of the Great Lakes. The basin for which plans may be developed may vary all the way from very small basins to large ones. They can be tributaries to a main stream, or they can be parts of

a main stream together with its tributaries between two points. They could be small streams flowing into the ocean, the gulf, or the Great Lakes. They can also be combinations of these basins. In other words, the concept of "basin" is intended to imply a plan which has interdependent units, each of which must work in conjunction with the others. If an area under study is composed of several of the smaller basins, such as along the coast or in the Great Lakes, these may be grouped together in one overall basin if it helps in the definition of the problem and in the formulation of plans to produce the end result. In other words, the term "basin" is not intended to be primarily a geographic description, but rather a term for whatever physical outline, large or small, is best fitted to a study of the pollution control problem. Secretary Udall told the committee:

Let me emphasize that when we refer to "clean rivers," we are not merely referring to a program. In fact, "clean rivers" is not as descriptive a term as it might be to a program which is not limited, or which would not limit its aid or its organization merely to rivers, whether they are larger rivers or small rivers, interstate or intrastate. We envision a program, and the legislation recommended is so intended, whereby cities on lakes which share the waters of the lakes, such as the Great Lakes cities, or even sea-coast cities, which may have a large or have a small river, or what we would call a very limited river basin, could all participate. In other words, all the cities, all the municipalities of this country would and should qualify under this "clean rivers" concept.

After the Secretary approves a basin pollution control and abatement plan, he shall transmit it, together with all views, comments, and recommendations received from any department, agency, or instrumentality of the Federal Government, to the Congress for approval which must be by a specific statute.

An exception is made in the case of the Tennessee and Delaware Rivers where the Tennessee Valley Authority and the Delaware River Basin Commission may develop a plan and transmit it directly to Congress for approval.

A new provision has been added to the

bill covering grants to industries for research and demonstration projects for the treatment of industrial and other waste which shall have industry-wide application. The reason for the addition of industrial grants is recognition of the fact that industry, which was at one time less of a polluter than municipalities and communities, has now become a major polluter. The complexity of some industrial waste problems requires the active involvement of industry itself which has intimate knowledge of manufacturing and other industrial processing operations. The stipulation that 70 percent of the cost of such investigations be borne by the Federal Government should be an inducement to have industrial support and participation in the studies.

We should not belabor industry for its growing contribution to this problem. Nothing will be gained by attempting to fix blame. The problem is here and it must be solved or some future generation will be worrying about clean oceans. More should be done by industry, and we were pleased to note that during the hearings evidence was presented to show that industry is attempting to do its part.

The Federal Government should do its part, too, and particularly should also the States, in helping in the solution of this problem, certainly, in developing means for controlling it. The inclusion of specific grants to industry for research is based upon the same concept as in existing law for grants to public and private agencies and institutions for research in this field. It would be of little value if we solved the technical means of preventing or alleviating the sewage from municipalities and failed to lend necessary assistance to research for the disposal of waste emanating from the various types of industrial and manufacturing processes.

Industrial research should not be limited to the technology of waste treatment. It should also include an investigation of possible financial methods of providing for this treatment, includ-

ing methods of providing treatment works to the smaller industries on an installment basis. If a small company is faced with the necessity of putting in extensive treatment works as a result of Federal and State laws or public pressure, such financing could be helpful.

We believe that this bill offers a fine opportunity to take aggressive action to eliminate what some have termed a national disgrace. Surely, we must try for there is certainly no more urgent domestic problem facing us today that water pollution control. As President Johnson said:

No one has a right to use America's rivers and America's waterways that belong to all the people as a sewer. The banks of a river may belong to one man or one industry or one State, but the waters which flow between those banks should belong to all the people.

I recommend to the House the passage of H.R. 16076.

Mr. JONES of Alabama. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I am pleased to yield to my dear friend and colleague, one of the leaders in this whole field of water utilization as well as preservation, the gentleman from Alabama [Mr. JONES].

Mr. JONES of Alabama. Mr. Chairman, no one has been more dedicated, more knowledgeable, or more useful in the cause of pollution abatement than has the chairman of the subcommittee who handled this bill. The Committee on Public Works as a whole has dedicated themselves to the arrest and the eradication of pollution problems wherever they exist. So I think the gains that we have made have been prominent. They have been of great national benefit. The problems are large. They are outstanding, and they certainly will require our constant attention.

But as long as the Congress of the United States has in it the gentleman from Minnesota [Mr. BLATNIK] with his zeal and his constant desire to improve our situation, we all stand in good stead.

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I believe it is necessary for us to

recognize and to give proper value to the gentleman from Minnesota [Mr. BLATNIK] and to the members of the Committee on Public Works for the distance we have gained to the present moment.

Mr. BLATNIK. The gentleman is certainly most generous. He is genuinely sincere, as always, in his comments. I do appreciate them deeply.

Mr. MILLER. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I am delighted to yield to the distinguished chairman of the Committee on Science and Astronautics.

Mr. MILLER. I should like to congratulate the gentleman in the well [Mr. BLATNIK] and the chairman of the Committee on Public Works, the distinguished gentleman from Maryland [Mr. FALLON], and the distinguished gentleman from Alabama [Mr. JONES], who have been the leaders in getting this legislation to the floor.

I congratulate the gentleman from Minnesota particularly, for having authored the legislation and for having been the foremost champion of stream pollution control in the House of Representatives.

The Committee on Science and Astronautics is making a very exhaustive study of the whole field of pollution because it is one which crosses the jurisdiction of many committees and must be attacked. We do not propose legislation, but we hope to lay down a blueprint of what can be done in the future.

I believe the gentleman will agree with me that today we are groping for a solution to the problem of stream pollution, which will go far beyond anything we see today. That also is true of air pollution.

One of the things which is responsible for this is the massive population growth and the inability of those who have gone before us to understand the effect this has upon our way of life.

I am happy that there are in the Congress of the United States people on both

sides of the aisle and in the great Committee on Public Works who realize this and are attacking it to the best of their ability today.

I thank the gentleman for what he is doing.

Mr. BLATNIK. I appreciate the remarks, which come from a distinguished and respected chairman of an outstanding committee. We know the work the gentleman has done on other aspects of water and oceanographic studies and, currently, the very excellent series of hearings conducted by the chairman of the subcommittee [Mr. DADDARIO] on the need for further research, new techniques and applications, and some new knowledge, either known or yet to be proved.

It must be admitted, and I am rather sad to confess it, that we have so neglected technological advances in this lowly and mundane field of water pollution control that frankly the modern-day pollution control plant is very little advanced over the one that was built 50 years ago. As the gentleman from Alabama [Mr. JONES] pointed out, in one of the findings during the hearings that his subcommittee of the Committee on Government Operations held, believe it or not, even with secondary treatment in municipal plants there is a high degree of complicated pollutants such as metallic substances, oxides, inorganic materials and organic materials, chemicals, synthetic fibers, and detergents that are still a real problem and manage to slip through the pollution abatement plants. It is just like trying to shake taffy off of your fingers. You just cannot do it.

Mr. REUSS. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the distinguished gentleman from Wisconsin.

Mr. REUSS. Mr. Chairman, I want to add my voice to the many that have praised the great work and leadership of the gentleman from Minnesota [Mr. BLATNIK] and his colleagues on both sides of the aisle, in bringing here to the floor of the House this afternoon what



I am sure will prove to be truly a piece of landmark conservation legislation.

Mr. Chairman, I listened very carefully to the distinguished gentleman from Minnesota, and to his description of the bill, and a very vital part of the bill is that portion which seeks to get the States to contribute to municipalities which have to build waste treatment plants.

An additional Federal incentive is given when the State agrees to pay at least 25 percent—30 percent of the estimated reasonable cost of the project.

Mr. Chairman, Wisconsin's 1966 water pollution law, described by Secretary Udall as a model, provides that the State shall pay up to 33⅓ percent of the total combined cost of the project costs and the net interest and financing costs, in equal annual amounts to be paid during the life of the bonds issued by the municipality.

Under the Wisconsin law let us suppose a waste treatment plant in a river basin costing \$1 million to construct. The Federal contribution of 50 percent would be \$500,000. The non-Federal costs of \$500,000 would be met by a bond issue, on which the interest over a 20-year period at 5 percent would be an additional \$500,000. The contribution by the State of Wisconsin under its 1966 water pollution law would be \$500,000—33⅓ percent of \$1,500,000, the total combined costs of the project and the net interest and financing costs. In such a case, the State of Wisconsin would seem to have amply met the requirement that it pay 25 percent of the estimated reasonable cost of the project—in other words, 25 percent of \$1 million, or \$250,000.

In the judgment of the gentleman from Minnesota, would this Wisconsin system of State help for municipalities adequately comply with the bill, H.R. 16706?

Mr. BLATNIK. Yes, in my opinion I am confident the Wisconsin system would be in full compliance.

I, too, want to join in commending the leadership of the State of Wisconsin

for her State law. There are only 12 out of the 50 States that are giving some form of assistance or support to municipalities in water pollution.

I hope with the coming of this new year in January we will at least have perhaps two-thirds of the State legislatures in session and I am hopeful that with the existing bill becoming the law of the land, that it will serve notice and be an encouragement to other States to do something quite similar.

I am quite certain that the provisions of this bill would justify reimbursement and that the State of Wisconsin would be in compliance with the provisions of this bill.

Mr. REUSS. Mr. Chairman, I thank the gentleman and I commend him again for his contribution toward creative federalism.

Mr. STALBAUM. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman.

Mr. STALBAUM. Mr. Chairman, I too want to join in commending the gentleman from Minnesota [Mr. BLATNIK] and the gentleman from Alabama [Mr. JONES] and others in bringing forth water pollution legislation not only this year but in the preceding years prior to my arrival on the scene in Washington.

As we are well aware, where we have large areas of lake frontage such as I have in my district, water pollution is always a problem both as to the streams that flow into the lake itself and the lake itself.

I think the gentleman from Minnesota [Mr. BLATNIK] is to be commended.

Mr. Chairman, I did rise, however, to clear up a specific point which the gentleman from Minnesota has made reference to.

I wonder whether I understood correctly, and I ask this primarily for the purpose of clarification—am I right or did I hear the gentleman correctly in his statement that under this bill projects can be started with some preliminary

approval and grants can be made at a later date?

Mr. BLATNIK. Yes.

Mr. STALBAUM. This is new in this particular legislation, as I understand it.

Mr. BLATNIK. You are correct. It is new in this legislation, but it is something that is quite common and has been followed for quite some years in the highway programs in which we have reimbursed States who have proceeded faster than the schedule called for.

Mr. STALBAUM. Mr. Chairman, I want to commend the committee for including this. As one who has been working on various grants-in-aid to municipalities and being new on the scene, as I mentioned, I find one of the most frustrating items is the fact that a community will get all steamed up and they want to go ahead with a very fine project, and seek to have the funds appropriated, and for one reason or another they cannot be approved that year and they tend to defer action. I recall, for instance, an editorial in one of my more prominently daily papers after I introduced the pollution bill. This paper, although normally very conservative in nature, has long supported efforts to

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abate water pollution. I thought they would come out with a very fine editorial in support of my efforts where we were going to get some 90 percent funds in my project if the bill had gone through—and I appreciate your efforts here—the end result was that in the editorial they said that they felt that my legislation was going to set back water pollution control because municipalities would keep on waiting, hoping to get additional percentages and be assured of their funds.

So I feel that by permitting municipalities and other groups, or groups of municipalities and States to go ahead with their projects and get preliminary approval and not have to wait for the grant of moneys before they can start on these projects in a small way, that you will be encouraging immediate ac-

tion by these municipalities, and not have the delays we have seen in legislation up to this time.

I am particularly pleased to see this included in this particular act and I am only hopeful we can get it in other similar acts that will be considered in this Congress.

Mr. BLATNIK. I thank the gentleman for his comments.

Mr. ROUDEBUSH. Mr. Chairman, will the gentleman yield?

Mr. BLATNIK. I yield to the gentleman.

Mr. ROUDEBUSH. Mr. Chairman, I rise in the strong support of this legislation.

Mr. Chairman, I rise today in support of the enactment of this worthwhile piece of legislation which will have the effect of accelerating the Federal water pollution control effort.

The bill before us will help the national effort to abate and control the pollution of this Nation's water probably more than any other Federal water pollution control bill ever enacted by the Congress. The reported bill not only provides additional funds for the various research programs in an effort to determine ways in which the waters of America can be better treated so as to obtain maximum purity, but it also substantially increases the authorizations to construct necessary sewage treatment works.

The inclusion of additional inducements to the States in this bill to participate more fully in the financial contributions toward the costs of the construction of sewage treatment works is commendable. Last year's act made significant steps toward greater State financial participation in meeting the cost of constructing sewage treatment works, and it is encouraging to see that this bill has included additional inducements to the States. This long-held Republican position of inducements to the States, held firmly by the minority Members since 1959, has greatly improved the Federal water pollution control effort.

The State of Indiana has made some strides toward controlling pollution within its borders, but the additional inducements provided in last year's act and this year's bill should permit it to make even greater financial participation efforts. The State of Indiana does not have any legislation which provides tax relief for water pollution control, although the 1965 general assembly enacted a law exempting stationary industrial air purification systems from taxation by the State of Indiana and any political subdivision. The 1965 general assembly did enact a law creating an industrial development fund from which loans may be made to municipalities for construction that will aid in the growth of industry within the Hoosier State. Loans may be made for any period not to exceed 10 years and shall bear interest at the rate of 2 percent per annum.

Mr. Chairman, several months ago I introduced a bill to amend the Internal Revenue Code of 1954 so as to encourage the prevention of water pollution by allowing the cost of treatment works for the abatement of water pollution to be amortized at an accelerated rate for income tax purposes. The bill before us today authorizes the Secretary of the Interior to conduct a study to determine ways in which industry, the largest single source of pollution, can more fully participate in the construction of facilities to control its own pollution without having to pass the expense on to the ultimate consumers of the products. The study is to include recommendations on tax incentives. I hope that the Secretary includes in this study recommendations for the needed amendments to the Internal Revenue Code to permit such accelerated amortization.

Mr. Chairman, I have strongly supported the enactment of water pollution control legislation in the past, for I sincerely feel that the control of pollution of our Nation's waters and the related abatement of those waters is essential for the long-range development of our Nation which relies so greatly on the

quality of our water.

I strongly support the enactment of the bill before us today and I urge its enactment.

The CHAIRMAN. The Chair recognizes the gentleman from Florida [Mr. CRAMER].

Mr. CRAMER. Mr. Chairman, and Members of the Committee, I rise in support of this important legislation. I am proud to report to the House, as did the gentleman from Minnesota [Mr. BLATNIK], that H.R. 16076 was voted out of the committee unanimously this year as was last year's Water Quality Act of 1965. From the first Federal water pollution control bill which was enacted in 1956, which I and several other Members had the privilege of cosponsoring, Congress has declared and carried out a war on water pollution. Congress is hereby declaring war on those who with destructive ignorance and with apparently vandalistic abandonment have polluted and clogged the once-sparkling rivers of our land. They have polluted and clogged the very arteries of our Nation with filth and have affected the health and welfare of our Nation adversely.

Adequate clean water is a challenge to the ingenuity of mankind and to the determination of Congress. It is a challenge that we must meet and we are to a large extent meeting it here today.

The substance of life and the long-range future not only of our Nation but of the world hangs in the balance on what Congress does in this year and succeeding years, on what industry does in the future, and on what the people themselves do in the future to preserve clean water and to abate and control water pollution.

It is a sad commentary that we, as the greatest Nation in the world with the most powerful legislative body in the world and with the greatest resources available to us in the world have within a stone's throw of the Nation's Capitol one of the filthiest rivers in the world—the Potomac. That is a clear-cut example and one well known to us that

action is critically needed in cleaning up the rivers of America.

I am proud to rise in support of this bill. I do not intend to duplicate the remarks of the gentleman from Minnesota [Mr. BLATNIK], but very briefly the bill provides for quite a substantial increase in authorizations for sewage treatment plants. It provides for \$2.3 billion additional through fiscal year 1971. Next year the authorization will be twice the present authorization of \$150 million per annum, or \$300 million; the following year \$400 million, or 2⅔ times the present authorization; the next year, fiscal year 1970, \$650 million, or 4⅓ times the present level; and the next year fiscal year 1971, some 6⅓ times the present sewage treatment works construction program, or \$950 million.

I believe this is as fast as the communities and municipalities can tool up for the job. It is a responsible approach. It will provide the necessary incentives to those communities to do more. With these incentives provided in this bill, it is my belief that next year there will be twice as much; the next year almost three times as much; the next year nearly five times as much; and the next year nearly seven times as much construction. With the essential incentives provided in this bill and for which we on our side have been fighting for a number of years, if the States put up 25 percent, an additional 10 percent, making it from 30 to 40 percent, will be available for Federal matching for the costs of constructing sewage treatment plants.

If in fact a clean river basin is established, and additional 10-percent incentive is provided, meaning 50 percent maximum Federal.

So every possible incentive is being offered to the local communities to go ahead with sewage treatment plant construction, with secondary treatment facilities included, so that our streams can be cleaned up.

I want to stress, however, that the bill in itself is not an arrangement; the bill

in itself is not the total answer, albeit a major step. Providing money for sewage treatment plants is only one aspect of the total solution and scope of the problem. Sewage treatment is one pollutant. There are many others. There is industrial pollution. There is sewage drainage pollution. There is agricultural pollution. Nature itself contributes through increased growths of nitrogenous algae. These are not being treated other than in a study or research

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manner with \$75 million a year provided and with general research provisions.

Industry must face up to its responsibility. We must provide the tools with which industry can do the job.

This bill provides, in section 211 thereof, for a study to determine possible future incentives for industry to join in the antipollution fight. I am glad to see that we did not take away the 7-percent investment credit to industries in the vote today on the floor of the House on the tax investment credit bill. I congratulate the gentleman from California [Mr. DON H. CLAUSEN], who offered this new section in the form of an amendment, for such a farsighted move.

Additional incentives are needed for industry to do this job. When the bill came before us it had three major provisions as recommended by the administration:

First. It had a provision for clean river restoration, setting up basin approaches, which must be the approach for cleaning up our rivers.

Second. It provided for no additional financing. At that time the administration did not recommend it, although later the administration came up with a \$2.4 billion recommendation.

Third. It provided for amendments relating to enforcement. I am glad to see that our committee was responsible in not acting on amendments to enforcement provisions when just last year we passed a sound enforcement procedure just presently getting underway under

which States are to provide a plan for abatement and proposed standards by June 30 of 1967.

We do not want to shake up the Federal Water Pollution Control Administration again. We just transferred it from HEW to Interior on May 10. We just completely changed their authority and responsibilities in the bill last year. So I believe it is sensible to let them settle down to business with cleaning up America's streams, and providing the standards and encouraging the States and local communities to do their jobs, rather than shaking them up again this year.

So I am glad to see that the committee felt that that was a sound approach, and no additional amendments to the enforcement provisions were proposed in this bill.

Mr. Chairman, I think we have a bill that is justified on almost any grounds. It is consistent with the President's recommendation. I want to congratulate the committee for recognizing in this instance fiscal responsibility in limiting the spending to that recommended by the President.

#### ADDITIONAL FEDERAL WATER POLLUTION CONTROL PROGRAMS

Mr. Chairman, the minority members of the committee in their additional views on H.R. 16076, as reported, spelled out a number of programs, other than the Federal Water Pollution Control Act, as amended, through which funds can be obtained for water pollution control programs. It is our belief that those who advocate increased authorizations to the level of a crash program are guided by their emotions more than by facts and evidences as to actual needs. They overlook other Federal programs which provide financial assistance in the construction of sewage treatment works and related facilities. There are no less than five Federal assistance programs which provide some type of funds for water pollution control programs and projects.

#### PUBLIC WORKS AND ECONOMIC DEVELOPMENT ACT OF 1965

Under this act, Federal grants up to 50 percent of the total cost and loans up to 100 percent of the total cost are available for "the acquisition of land and improvements for public works, public service, or development facility usage, and the acquisition, construction, rehabilitation, alteration, expansion, or improvement of such facilities, including related machinery and equipment" within redevelopment areas. Sewage treatment works can be and have been financed under this act.

In addition to this, section 101 of the act authorizes "supplementary grants" for the purpose of increasing the Federal contribution up to 80 percent of the cost of projects constructed under other Federal grant-in-aid programs, including sewage treatment works financed under the Federal Water Pollution Act.

Under the act, specific amounts are not set aside for sewage treatment plants, but a total of \$500 million is authorized for all grants and supplemental grants for the fiscal years 1966-69, inclusive, and annual appropriations for making and participating in loans are authorized up to \$170 million for fiscal years 1966-70, inclusive.

#### HOUSING AND URBAN DEVELOPMENT ACT OF 1965

The Housing and Urban Development Act of 1965, Public Law 89-117, provides for Federal grants of up to 50 percent of the total cost of the project to finance specific projects for basic public water facilities, including works for storage, treatment, purification, and distribution of water, and for basic public sewer facilities in areas with comprehensive planning as defined in the act except those works and facilities eligible under the provisions of the Federal Water Pollution Control Act, as amended. Such Federal grants may also be made for the advance purchase of land to be utilized for future construction of works

thereon. There is some question as to whether or not such funds are being used to construct works and facilities which are eligible under the Federal Water Pollution Control Act. The act authorized \$200 million per annum for each of the fiscal years 1966, 1967, 1968, and 1969, exclusively, for such purposes totaling another \$800 million from the Federal Treasury.

APPALACHIAN REGIONAL DEVELOPMENT ACT  
OF 1965

This act, Public Law 89-4, authorizes the Secretary of the Interior to make grants for the construction of sewage treatment works in the Appalachian region in accordance with the provisions of the Federal Water Pollution Control Act, as amended. The act authorizes a sum not to exceed \$6 million to be appropriated for the program.

In addition to this, section 214 of the act authorizes "supplementary grants" to increase the Federal contribution up to 80 percent of the cost of constructing projects under other Federal grant-in-aid programs, including sewage treatment works under the Federal Water Pollution Act. A total of \$90 million is available for making "supplementary grants" under section 214.

CONSOLIDATED FARMERS HOME  
ADMINISTRATION ACT, AS AMENDED

Under this act, as amended in 1965—Public Law 89-240—the Secretary of Agriculture may make grants totaling up to \$50 million each fiscal year to finance "specific projects for the development, storage, treatment, purification, or distribution of water or the collection, treatment, or disposal of waste in rural areas."

In addition to this, the act—as amended by Public Law 89-240—authorizes the Secretary to make or insure loans to finance—among other things—the "conservation, development, use, and control of water, and the installation or improvement of drainage or waste disposal facilities" in rural areas.

As used in the act, the term "rural areas" does not include any area in any city or town which has a population of more than 5,500 inhabitants, thus assuring that the financial assistance will go to those areas which are least likely to have adequate taxing authority, bonding capacity, or other financial resources.

PUBLIC FACILITY LOANS—42 U.S.C.  
1941-1947

This program provides long-term construction loans to local public agencies for needed public works for which financing is not otherwise available on reasonable terms and conditions. Loans may be made to finance up to 100 percent of the project cost for a wide range of non-Federal public works, including sewage treatment works.

Mr. Chairman, title II of the Demonstration Cities Act of 1966, as reported by the House Committee on Banking and Currency, provides for Federal grants of up to 70 percent of the total costs for facilities within a metropolitan area as defined in the act and meeting all qualifications for metropolitan comprehensive planning set forth therein. Water pollution control and sewage treatment facilities are eligible for such assistance under the provisions of the bill, if enacted in its present form.

REIMBURSEMENT PROVISIONS—SECTION 207  
OF H.R. 16076, AS REPORTED

Mr. Chairman, on March 15 of this year, I introduced a bill, H.R. 13655, to amend section 8 of the Federal Water Pollution Control Act to include a new subsection (h) thereof to authorize reimbursement of States, municipalities and intermunicipal or interstate agencies that wish to undertake the construction of sewage treatment works in advance of the availability of Federal funds. The gentleman from New Hampshire [Mr. CLEVELAND] introduced an identical bill on that same date. Existing law contains no provision for Federal reimbursement to those entities for the

construction of sewage treatment works in

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advance of the availability of Federal participating funds.

Although similar bills for Federal reimbursement had previously been introduced this Congress, H.R. 13355 was the first measure whose provisions for reimbursement for the construction of sewage treatment works had general, nationwide application. Most previously introduced bills had provided for reimbursement only to States which use the proceeds of bonds issued by the State, county, city, or other political subdivision of the State for the construction of one or more projects which would otherwise have been eligible for a grant under the provisions of section 8 of the act. Inasmuch as those measures were too limited in their application to a national need, being particularly limited at this time to the State of New York, I felt it essential that legislation be introduced to provide for a method of reimbursing those entities recognized in the act as having authority to receive grants under its provisions and subsequently did so.

The need for reimbursement procedures in the act has been evident to me as the ranking minority member on the committee for some time. It is encouraging to see that the committee has adopted the position held by certain minority members of the committee that reimbursement procedures are essential to continue accelerated construction programs in a number of States and to encourage others to move ahead with construction projects in advance of the availability of Federal participating funds. The expansion contained in my bill to provide for reimbursement to States, municipalities, intermunicipal agencies and interstate agencies will meet the requirements of the program more effectively than merely providing for the States being able to claim payment of any portion of sums allotted or reallocated under section 8 as previously

introduced bills would have done.

The minority members of the committee have advocated greater financial participation by the States in the construction of sewage treatment works for many years, particularly since 1959. Due to a great extent upon the insistence of the minority members that additional authorizations for appropriations should be coupled with inducements to the States to participate in the cost of constructing sewage treatment works, the Water Quality Act of 1965 contained, for the very first time, measures to bring the States into the financing of the cost of construction of sewage treatment works under the provisions of the Federal Water Pollution Control Act, as amended. The adoption of additional inducements to the States for participation in the construction program and the providing of procedures for Federal reimbursement in H.R. 16076, as reported, are a continuation and an extension of this long-held minority position of greater State participation.

My bill, H.R. 13355, provided that if, prior to commencement of construction of any treatment works in advance of the availability of funds for a grant under section 8 of the act, the Secretary of the Interior approves such a project, and the State, municipality, intermunicipality, or interstate agency thereafter constructs such a project and submits an application to the Secretary approved by the appropriate State water pollution control agency or agencies for a grant for such project, the Secretary, upon his approval of such application, would be authorized to make a grant under section 8 for such project to be paid from future appropriations. The bill provides, however, that no such grant shall be made unless all of the provisions of the Federal Water Pollution Control Act have been complied with to the same extent and with the same effect as though the grant were to be made for future construction of the project and that no grant shall be made in an amount exceeding a grant which would otherwise be made under the sec-

tion for the future construction of the project.

Under the provisions of H.R. 13655, neither an approval of the projects by the Secretary of the Interior prior to construction, nor the making of a grant by the Secretary for a project to be paid from future appropriation, nor any other provision of the new subsection (h) which my bill would add to section 8, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for a project.

The substantive text of my bill has been included, word for word, as section 207 of H.R. 16076, as reported by the committee.

Mr. Chairman, for the benefit of this discussion and for the benefit of the Members, the new section 207 of the reported bill reads as follows:

SEC. 207. (a) Section 8 of the Federal Water Pollution Control Act is amended by adding at the end thereof the following new subsection.

"(h) If, prior to commencement of construction of any treatment works in advance of the availability of funds for a grant under this section, the Secretary approves such project, and the State, municipality, intermunicipal, or interstate agency thereafter constructs such project and submits an application to the Secretary approved by the appropriate State water pollution control agency or agencies for a grant for such project, the Secretary, upon his approval of such application, is authorized to make a grant under this section for such project to be paid from future appropriations. No such grant shall be made (1) unless all of the provisions of this Act have been complied with to the same extent and with the same effect as though the grant were to be made for future construction of the project, (2) in an amount exceeding a grant which would otherwise be made under this section for the future construction of such project. Neither an approval of the project by the Secretary prior to construction, nor the making of a grant by the Secretary for a project to be paid from a future appropriation, nor any other provision of this subsection, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for a project."

(b) The amendment made by subsection (a) of this section shall apply to any project on which construction is initiated after June

30, 1966, except that in the case of any project on which construction was initiated after June 30, 1966, and before the date of enactment of this Act, the Secretary may approve such project for the purposes of section 8(h) of the Federal Water Pollution Control Act subsequent to the commencement of construction.

The inclusion of provisions establishing reimbursement procedures for the construction of sewage treatment works recognizes in legislation for the first time that the Federal Government needs to provide some procedures for reimbursement to those entities which are moving ahead with their construction programs at a rate in excess of the availability of Federal funds to participate in such construction, while at the same time giving notice that such provisions shall not be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for a project to be funded from future appropriations.

While keeping in mind that the new subsection 8(h) does not constitute a commitment or obligation of the United States, it will permit many States, municipalities, intermunicipal agencies, and interstate agencies who are meeting their responsibilities in the area of water pollution control with determined efforts to clean up their rivers and streams and who have, consequently, accelerated their construction programs to continue or even further accelerate those programs with the understanding that reimbursements provisions are contained in the law.

Hopefully, with the incentives to the States contained in the reported bill this year, and with means for reimbursement available, if this bill is enacted, along with the incentives to the States contained in the Water Quality Act of last year, many more States will accelerate their construction program. Water pollution is a problem which must be met with by the exercise of responsibility on all levels of government—Federal, State, and local. This can only be done effectively through making it worthwhile for



the States to participate in the construction of sewage treatment works.

As I have already pointed out, section 207 of the reported bill provides for reimbursement for the construction of any treatment works initiated after June 30, 1966, in advance of the availability of funds for a grant, subject to five qualifications which have been spelled out in the committee report on the bill, House Report No. 2021. These five qualifications are:

First. The Secretary of the Interior must approve the project prior to commencement of construction, except for projects initiated after June 30, 1966, and before the date of enactment of this act which he may approve subsequent to commencement of construction.

Second. The State or appropriate agency which constructs the project must submit an application to the Secretary, approved by the appropriate State water pollution control agency, for a grant for the project.

Third. Upon his approval of the application, the Secretary is authorized to make a grant for such project to be paid from future appropriations.

Fourth. All provisions of the act must have been complied with to the same extent and with the same effect as though

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the grant were to be made for future construction of the project.

Fifth. The approval of the project by the Secretary, or the making of a grant, shall not be construed to constitute a commitment or obligation of the United States to provide funds.

This reimbursement provision applies to grants made under the authority of section 8, as amended, and does not apply to grants under title II of the clean river restoration program.

Mr. Chairman, the inclusion of provisions for reimbursement for the construction of sewage treatment works is a step forward in this highly important program.

Mr. Chairman, I believe that limiting

this to what our present evidence and present experience shows probably is the maximum capability for these communities in sewage treatment plants for the next four years is a wise move. Should evidence be brought to the attention of Congress in future years that additional money is needed in those future years, we can then consider that additional evidence.

I ask for support by the House of this bill. I hope it will pass unanimously, as did the bill last year, which was a major step in cleaning up America's streams.

#### STUDY FOR WATER POLLUTION CONTROL TAX INCENTIVES TO INDUSTRY

Mr. Chairman, the Committee on Public Works included a new section 211 of the bill, H.R. 16076, the Water Pollution Control Act of 1966. The new section authorizes the Secretary of the Interior to conduct a full and complete investigation and study of methods for providing incentives designed to assist in the construction of facilities and works by industry designed to reduce or abate water pollution. The study shall include, but not be limited to, the possible use of tax incentives as well as other methods of financial assistance. In carrying out the study, the Secretary of the Interior shall consult with the Secretary of the Treasury as well as the head of any other appropriate department or agency of the Federal Government.

As the new section 211 is written, as reported, there is no date by which the Secretary is to make the report to Congress. I understand the gentleman from Ohio [Mr. HARSHA] will offer an amendment, at the appropriate time in today's consideration of the bill, to require the Secretary to make the report to Congress on or before June 30, 1968. I hope this amendment is accepted by the leadership, and I am confident that it will be accepted by them.

The inclusion of this amendment, its enactment, and the subsequent report of the Secretary should aid the Congress greatly in determining what the role of

industry should be in the overall effort to clean up America's waterways.

This amendment brings to the fore the overall question of tax incentives to industry for the construction of sewage treatment works, and at this point in my remarks today, I will not dwell at any great length on it; however, in the near future I intend to make a detailed explanation of this entire area of water pollution control to the Members for their benefit. The action just taken by the House to exclude facilities for air and water pollution control from the suspension of the tax investment credit under the Internal Revenue Code of 1954 does not go to the center of this overall issue on such facilities, although it is a landmark in the recognition by Congress of the need to provide for accelerated amortization of air and water pollution treatment facilities constructed by industries.

Mr. REID of New York. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from New York.

Mr. REID of New York. I commend the gentleman in the well for this statement and for his initiative and work on the committee. I rise in support of this legislation; however I should like to ask him a question about the formula.

As I understand it, if there is no State matching of individual project grants, the formula would be 30 percent or \$2.4 million for an individual project, whichever is the smaller of the two.

Mr. CRAMER. That is under the present law, Public Law 560, as amended.

Mr. REID of New York. Under the present law. Then it would be 30 percent or \$9.6 million for two or more municipalities, whichever figure is the smaller of the two. And if there is a State matching grant of 30 percent, the dollar limitation would be removed entirely and the Federal share would go to 40 percent, and additionally it would go to 50 percent if there were a river basin approach.

Mr. CRAMER. That is correct.

Mr. REID of New York. In other words, in the case of New York, which has a \$1.7 billion program, this would permit a matching of either 40 or 50 percent, depending upon the approach of the State or States.

Mr. CRAMER. So long as the State matching equaled 25 percent of the total cost of the project.

Mr. REID of New York. I wish to say that I believe the new Federal matching-grant formula is a significant advance which is very important to our State and to Westchester County and Long Island Sound. I commend the gentleman for his statement.

Mr. CRAMER. I thank the gentleman.

Of course, this effort to get the States into the picture is a result of the work last year. This 10-percent incentive, I believe, will result in the States coming into the picture more and more. It will have the effect of a partnership program, Federal-State-local, and also it will have the effect of cutting back the Federal money needed in the future.

Mr. CLEVELAND. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I am glad to yield to the gentleman from New Hampshire.

Mr. CLEVELAND. I am glad that attention is being paid to the fact that in this legislation a significant advance is being made in encouraging those States which are already doing something in this area to do more and encouraging those States doing nothing to come into the picture.

As the gentleman knows, we discussed this at great length in the committee and during a good many sessions of that committee. I believe that one of the really significant features of this legislation is the extra 10-percent incentive grant given to States, such as my own State of New Hampshire, which have already gotten into this with both feet.

As the gentleman knows, New Hampshire has the largest contribution of any State in the Union. It is now up to 40 percent. There are other States which are up to 30 percent.

This extra 10-percent bonus under this act I believe is one of the most significant phases of the legislation.

The gentleman from Florida is to be commended, along with the other members of the committee, for helping me to get this feature into the bill and to keep it in the bill.

New Hampshire also gives a property tax abatement for pollution abatement installations by private industries. This is why I have proposed and fought for a Federal tax credit as an incentive to industry to join the battle against pollution and to follow New Hampshire's lead. Our action earlier today in adopting the Byrnes amendment to continue the investment tax credit for pollution abatement installation is a step in this direction.

Mr. CRAMER. The gentleman is correct. I congratulate the gentleman for the services he rendered not only to his State but also to the Nation in providing for these incentive additional amounts not only to his State but to other States.

I believe this is the key, really, to effective programs in the future. I congratulate the gentleman.

The gentleman also supported the effort, in section 207, to reimburse for projects already constructed under proper conditions, which is a matter the gentleman in the well was quite interested in.

The gentleman from New Hampshire [Mr. CLEVELAND] has helped the committee with his knowledge in the pollution abatement field. Apparently, his State is a leader in this respect, and the gentleman's long experience in the New Hampshire State Senate has brought fresh insights to the work of our committee. He can take full measure of credit for the 10-percent bonus incentive features of this legislation for which he fought and argued persuasively in committee. The people of his district should be proud of him and the Nation gratified for his contributions.

Mr. HALLECK. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from Indiana.

Mr. HALLECK. It is late, and I do not wish to prolong the debate, but I wish to remark, as I suppose almost the newest member of the great Committee on Public Works, it has been a real pleasure for me to work along with the other members of the committee in the development of this bill. I am happy to see it brought to passage today. I am sure it will be good for the whole country.

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Mr. CRAMER. I thank the gentleman from Indiana.

I wish to say that I am proud, and rather humble, I might add, to be serving on the committee with the gentleman. It is the way things go in Washington that I have seniority on the committee greater than that of the gentleman from Indiana. The gentleman has done a tremendous job in working not only on the water pollution control bill but also on many other matters before the Public Works Committee. I for one am doubly proud to have him as a member of that committee.

Mr. REID of New York. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from New York.

Mr. REID of New York. I should like to thank the gentleman and also the majority for the new formula of assistance they are giving to the State of New York. In its first 6 months the pure water program had already expended \$493 million. I believe the additional help authorized in this bill will be vital to the New York program and highly consistent with what we are trying to do in the State of New York.

Mr. CRAMER. I thank the gentleman.

Mr. DON H. CLAUSEN. Mr. Chairman, will the gentleman yield?

Mr. CRAMER. I yield to the gentleman from California.

Mr. DON H. CLAUSEN. Mr. Chairman, again, I am pleased to be able to

rise in support of legislation designed to improve the water quality in America. As we present this bill to the House today, it makes me proud to be one of the members of the Public Works Committee. With the gentleman in the well [Mr. CRAMER], expressing himself in his usual articulate manner, I think it is appropriate to recognize him for his outstanding work on this legislation. Also, I want to compliment the chairman of our subcommittee [Mr. BLATNIK] for permitting the committee to work its will. Because of this, we again have been able to report a bill out unanimously and I will predict the vote on this bill by the full House will be unanimous as it was last year.

I will not take the time to repeat what has been presented so ably by Mr. BLATNIK and Mr. CRAMER. However, I would like to place emphasis on a couple of points.

First of all, in describing this bill, I truly believe it could have been more accurately labeled as the "Water Quality Incentive and Inducement Act of 1966." I say this because of the emphasis on providing grant incentives to States, communities, and counties to move forward in the development of water pollution control programs. This should prove to be very successful in helping these political subdivisions resolve some of their most pressing problems. Also, I am pleased with the fact that our committee accepted my amendment, which is section 211 of the bill, to direct the Secretary of the Interior to conduct a full and complete investigation and study of methods for providing incentives to assist in the construction of facilities and works by industry to reduce or abate water pollution. The study will include, but not be limited to, the possible use of tax incentives as well as other methods of financial assistance. Today the tax bill just passed gives recognition to this objective so we are making great progress.

While I am on this particular point, I do want to recognize the present and

contemplated nationwide effort being carried forward by the League of Women Voters addressed specifically to the question "Should financial help be given by the Federal Government to private companies as incentive and assistance in meeting the cost of water pollution abatement?" I believe their effort is very timely and I commend them for their interest and activity—they are rendering a very valuable service.

During the committee hearings, the new director and chairman of the Water Resources Committee for the league, a Mrs. Donald Clusen, of Green Bay, Wis., appeared and testified before our Public Works Committee. We were all tremendously impressed with her excellent testimony. We all felt that her presentation was very realistic and I believe this bill, as now presented to the House for approval, is a reflection of her point of view. Mr. CRAMER and I both felt that to enact a law is one thing but "tooling up for implementation" of that law is another. It takes a certain amount of time for the communities and States to find, hire, and train the type of qualified personnel to carry out the administration of the program.

Mrs. Clusen said, very wisely:

We would like to see the programs established by the present laws given a longer trial

In view of her excellent testimony, I would like to include her full remarks in the RECORD at this point because as the record is built here today, it would not be complete, in my judgment, unless it included her full statement.

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Mr. WRIGHT. We have a very pleasant task to bring before the committee Mrs. Donald E. Clusen, director and chairman of the Water Resources Committee of the League of Women Voters of the United States.

The League of Women Voters is an organization which has been crying in the wilderness for oh these many years, on behalf of pure water, to eliminate contamination of our streams.

Of all the organizations that appear before us, it is probably the most nonpartisan and

in many cases the most constructive. The League of Women Voters is an organization that has no particular axes to grind. Your activities do not benefit your own members any more than they benefit the Nation as a whole, so it is an honor always to have a representative of this splendid organization with us, and we want you to take whatever time you desire, and we are anxious to hear from you.

If you would like, Mrs. Clusen, to present the other ladies who are with you.

Mrs. CLUSEN. Thank you, Mr. Chairman. As the new chairman of the Water Resources Committee of the League of Women Voters of the United States, I find your introduction most heartwarming.

STATEMENT OF MRS. DONALD E. CLUSEN, DIRECTOR  
AND CHAIRMAN OF THE WATER RESOURCES  
COMMITTEE, LEAGUE OF WOMEN VOTERS  
OF THE UNITED STATES

Mrs. CLUSEN. In a sense, I am fresh from the halls of the State legislature and appearing before legislative committees, but the thought of appearing before this august congressional committee has been upsetting me for a couple of days. However, it has been a most interesting experience.

I am Mrs. Donald E. Clusen of Green Bay, Wis., an elected director of the League of Women Voters of the United States.

I am the spokesman for the 146,000 members organized in 1,227 local leagues in the 50 States, the Commonwealth of Puerto Rico, and the District of Columbia.

Although this is my first opportunity to represent the League of Women Voters at a congressional hearing, since 1960 I know that a number of preceding chairmen of the league's water committee have been here to appear in support of improvements and additions to the Federal Water Pollution Control Act. In their local communities and in their States, also, our members have been working for stronger laws, for better enforcement, and for additional financing to mitigate water pollution.

As you probably know, league stands are the outgrowth of study, discussion, and consensus by league members in local meetings. Our current position on water resources was most recently confirmed at our national convention in May of this year, when the 1,343 voting delegates sent by their local and State leagues approved this statement, and I quote.

"The League is convinced that the program of federal aid to local communities, expiring this year, has been a great incentive for the installation of sewage treatment plants which should be continued and expanded. We believe that our large cities have not benefited under the program to the extent that they should, since the cost of projects to meet their needs are far in excess of grants

allowable under existing law. We have supported proposals for federal research and recognize that more research is needed on treatment methods for new pollution problems but we are convinced that research efforts should not be unnecessarily duplicated. We have supported efforts to make our states strong and to approach water resource problems on a regional or river-basin basis. Legislation which will help to strengthen state government and help comprehensive planning by a regional approach is approved in principle."

The League of Women Voters prefers to see local governments make a strong effort to bear the cost of good waste management; and league members often back this preference by hard work to pass local sewer and treatment facility bond issues. We encourage State assistance to lower jurisdictions; for example, the leagues in New York State made a great effort to build support for proposition 1, the State's pure waters bond issue. Leagues carry on this work; not because their numbers fear "big government" on the Federal level, but because they have agreed upon the principle of shared financial responsibility in water resource development. It is for this same reason that the League of Women Voters of the United States, since 1960, has steadily supported Federal grants for sewage facility construction.

The Water Quality Act has added greatly to the work the responsible State agencies should be doing. Since this additional responsibility was placed on the States by action of the Congress, particularly by the House, it seems appropriate that additional Federal funds be used to help States carry out their new standard-setting duties. The league therefore supports the proposal to

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double Federal aid to States and interstate agencies for establishing and maintaining their pollution control programs.

For the standards program for interstate waters and the cleanup schedules set by Federal enforcement conferences to be effective, much more money must be spent, especially by medium and large cities, for whom Federal aid has been restricted because of the dollar ceiling on grants. The league therefore supports the proposal that Federal aid be 30 percent of construction cost, with no dollar ceiling. However, because we believe that interjurisdictional cooperation and enforcement of State laws will be improved if States help pay for pollution abatement facilities, we would like to see Representative BLATNIK's "basic 'carrot and stick' approach" apply here. We suggest that the full 30 percent of construction cost be paid by the Federal Government when the State agrees to match this Federal help.

Tied in this way, the removal of the dollar ceiling should act as an incentive for States to share the responsibility for financing necessary construction.

We also support an increase in the funds authorized for the construction grant program. Whether it should be the increase proposed in H.R. 16076 and in H.R. 13162 and the companion bills is the proper amount to get the job done and is the precise amount for this country to invest for control of municipal water pollution, we neither know nor have the factual basis for judging. In fact, it would be presumptuous for us to state an exact figure.

We therefore welcome inclusion in H.R. 16076 of the proposal for a detailed study of the cost and economic impact of attaining and maintaining water quality standards as established under Federal and State law.

It seems only commonsense to encourage States and localities to move ahead on cleanup as rapidly as they can. We therefore support the idea of authorizing reimbursement to States and local governments which prepay project costs, during the time of this construction grant authorization.

Many league members have attended enforcement conferences in their own river basins, and at the invitation of State conferences league representatives have testified at a number of these conferences. More specifically, in the Lake Erie Commission, the Michigan one and the Connecticut River.

While this may pose some difficulties in scheduling, and so forth, we think this is outweighed by the advantages of wider involvement and the presentation of the full range of information. We believe that the citizens of each basin have knowledge and understanding of the problems and should have an opportunity to express them at these conferences.

In the Lake Erie Basin, where leagues have been studying regional pollution problems, some of our members found it hard to understand why information on industrial waste discharge was so difficult to obtain. They were encouraged when, at the time of the Federal enforcement conference in Cleveland, a number of companies volunteered to supply the Federal pollution control agency with information about discharges from their plants. With industrial wastes becoming an ever bigger part of the U.S. pollution problem, we think the time has come when the quantity and quality of industrial as well as municipal wastes must be known to those responsible for water quality management. The league supports the modest proposal of H.R. 16076 that such reports be required. If the needed information can be obtained in this way, the Secretary may not need the subpoena power which is proposed in a number of other bills.

For the past 10 years the League of Women Voters of the United States has been interested in governmental machinery for river basin planning and administration, and as part of this concern the league worked for passage of the Water Resources Planning Act.

It has been our belief that planning should be long range and comprehensive. We would be as reluctant to see pollution control separated from other elements of basin water management as we have been to see planning for basin flood control or navigation carried out without proper concern for water quality. We expect planning for pollution control to be an integral part of a comprehensive plan prepared by any river basin commission created under title II of the Water Resources Planning Act.

We have been saying for many years that rivers are not respecters of jurisdictional lines, and from the time we adopted a position in favor of river basin planning back in 1958, leagues in different cities and in different States have worked together in inter-league river basin groups. We organized our own river basin groups, and we organized our own organizations to examine the problems and work for their remedies with the welfare of the entire basin in mind.

No organization is more convinced than the league that pollution control needs to be planned in terms of the whole river, that citizens and governments in the basin must move beyond planning stages into joint action and then must continue united effort for improved water quality management for the entire basin. Many leagues have been trying in various ways to carry this message to their communities and their elected officials.

Because of our conviction of the need for interjurisdictional planning and projects, the league has supported the bonus for projects conforming to a metropolitan plan and the larger amount of aid made available when municipalities combine their grants. However, we question the value of creating a special planning commission as proposed in H.R. 16076. Is this needed? Cannot States and local governments set up permanent arrangements to handle basin pollution now? We think it may add to the confusion to have the Secretary initiating single purpose river basin planning commissions at the same time that, at the request of the Governors, the President is creating comprehensive river basin planning commissions. We agree with many of the aims of the administration's "Clean Rivers Restoration Act," H.R. 13104, but these proposals seem to us to be poorly attuned to the workings of local government. For this reason and because we think this is not the time to crystallize these aims into Federal law, the league does not support this bill.

We have considered the recommendations

for stronger enforcement as proposed in a number of bills presently before this committee. The league wants communities to be required to live up to Federal and State statutes and regulations affecting water quality, just as we want to see Federal installations required to set a good example in this respect. Our members realize that industrial pollution must be controlled. However, at the present stage in the development of water quality management, we think that emphasis should be placed on Federal encouragement, for we believe that where the public is aroused, as it certainly is in the Lake Erie Basin, and as seen in the testimony of the Cleveland mayor, financing remains the obstacle to be overcome. For this reason, the league does not support the proposals to strengthen Federal enforcement provisions at this time.

We would like to see the programs established by the present laws given a longer trial. We believe that research and development, State pollution control programs, treatment facility construction, the program for standards for interstate waters, and the Federal enforcement possible under the Federal law must go strongly forward and be given an adequate try. We agree that the time has come to provide specifically for studies of estuaries and pollution from vessels and boats, particularly on the Great Lakes. We believe that the Nation is ready to move and that the Federal incentive program is the level.

We have already listened with interest to comments here on proposals to provide financial incentives to industry for the treatment of their waste. I think you will be interested to know that the league is currently involved in studying these proposals and seeking from its members in their local units an expression of opinion on this subject by January 3 of next year.

If agreement is reached either for or against this philosophy, we will be presenting this to you in the next session of Congress and in various State legislatures.

I live on a polluted river, as you know if you know Green Bay, and I have seen what happened to recreation and tourism, to a municipality, to industry, as a result, and although my State has recently adopted progressive authority on legislation to remedy conditions, we in the league throughout the United States firmly believe that Federal funds, Federal enforcement, and governmental cooperation are essential to the solution. We commend you gentlemen of this committee for what you have done in the past, and we anticipate with confidence what you will do in the future in the prevention of pollution and the protection of American streams.

Mr. WRIGHT. Mrs. Clusen, I know I speak

for the entire committee in expressing our gratitude to you and to the organization you have represented, for your testimony today and for that which you and your associates in the League of Women Voters have done so effectively down through the years in attempting to call the public attention to the demonstrable need for cleaning up our rivers.

I want to ask one or two brief questions on the comments you have made.

You made reference in your statement to industrial pollution, the difficulty of obtaining specific information as to the sources and volume of pollutants that enter streams from specific industries.

A little later on you declared that your organization does not favor the somewhat punitive approaches of increased penalties for pollution of streams.

You are aware, I am certain, of a vast increase in industrial pollution that has occurred during the last several years in which it certainly seems likely to continue and grow. If we are not to improve the problem of industrial pollution through a system of penalties upon those who willfully pollute a stream or to fail through inaction to clean up their wastes before dumping them into the rivers, what would you recommend as the best approach toward this, and how do we go about encouraging—if that is the word—encouraging industry to clean up its rivers, its wastes before it dumps them into the rivers?

Mrs. CLUSEN. In the first place, in the beginning of your questioning, I believe you are tying this, Mr. Chairman, to my statement about difficulty of obtaining information—and, of course, following this we are supporting the proposal that these reports be required, and saying that we think, however, that we could give this a trial before saying that the Secretary should have subpoena power.

As far as increasing Federal enforcement—and I think probably when I used the word "encouragement"—basically I was talking about the same thing with a somewhat different philosophical concept.

I think it is the feeling of the league that there may come a time when stronger enforcement is needed. But we do think that the machinery exists right now to encour-

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age—and the funding exists, if it is increased as we hope it will be—that the machinery and the money exists now to get some results as far as industrial pollution is concerned; and that maybe this needs another 2 years before it is necessary to increase enforcement.

This is very much a problem in the area where I live, where industrial pollution—particularly the papermill variety—is quite

a problem; but I think that some of the very progressive gentlemen who are heading this or these industries are working very hard to try to cope with this problem as fast as they can.

I think that all we are saying is wait a little while longer before we come or become too punitive about it.

Mr. WRIGHT. Thank you. I do not think I have any other questions. Do other members of the committee desire to question?

Mr. CRAMER. My comment and questions will be very brief. I want to congratulate you and the league. I think this is one of the most constructive and objective statements that has been made before this committee on water pollution. I am particularly interested in the fact that you are going to study the incentive possibilities related to private enterprise, and I hope testimony from industry yesterday was some help. It certainly was to me. I know it will be in your deliberations.

Second, I am glad to see that you feel this incentive approach is essential. You know there has been some disagreement on that in the testimony before us in that that has been our objective for a number of years to try to, at least some Members, to get the States in the picture.

As I gather from your testimony, you think that is essential, do you not?

Mrs. CLUSEN. And not only the States, we approach the opinion of sharing financing. We believe there should also be local involvement as much as possible.

Mr. CRAMER. The suggestion on the subpena power is one more or less consistent with the position of Congress last year, and I think that is extremely well taken.

We do have the basic problem, however, in the context of your statement, if we decide that that is the approach to take, as it relates to how much money is available to do the job, how much of that the States should put in, and where normally it would come from. The Senate has passed a \$6 billion bill. The administration has suggested they might be willing to go as far as \$3.46 billion bill just recently.

The initial approach of the administration was not to provide increased construction grants for sewage treatment plants this year. It is a dilemma our committee has.

What do you think we ought to do?

Mrs. CLUSEN. I have a basic confidence that you will be able to reconcile these figures, and that you will find it proper to recommend as much as you think we can afford at this time.

Mr. CRAMER. I appreciate your answer; and I realize that it is our problem. I will not ask you to be more definitive.

You have been very helpful to us.

Mrs. CLUSEN. Thank you.

Mr. CLAUSEN. Mr. Chairman, I want to join the commendation as expressed by Mr. CRAMER, to the fact that we have the name similarity makes it all the more enjoyable that we would have the fine testimony by the lady from the League of Women Voters.

In your testimony on page 4, you refer to the fact that—this is at the bottom of the page:

"Cannot States and local governments set up permanent arrangements to handle basin pollution now?"

You may be pleased to know I gave a similar speech in my own congressional district where we have two large river basins; and it follows essentially the recommendations you have made here.

What we have used is the establishment of a so-called joint exercise of power agreement among the various communities or the counties involved, and I would be inclined to send the League of Women Voters a copy of my speech in this regard.

Mrs. CLUSEN. We would be very glad to have it.

I support H.R. 16076 as it has been amended and reported by our Committee on Public Works. Under the provisions of this bill, the next logical step in the ever-increasing effort to end the wasteful and unnecessary pollution of this country's waters has been taken.

The Federal Government has long played a leading role in the improvement of our rivers and harbors and has financed and directed irrigation and flood control projects since the early 1900's; however, it was not until 1956 under the Eisenhower administration that the first comprehensive Federal Water Pollution Control Act was enacted. Under this act, grants were made to States and interstate agencies for water pollution control activities, and to municipalities for the construction of sewage treatment works. Also, a permanent procedure for governing Federal abatement action against interstate pollution was established.

Although the 1956 act was a good beginning and laid a firm foundation for future action, it soon became apparent that, if this program were to be successful, there would have to be greater State financial participation in the construction of sewage treatment works. Thus, since 1959, the Republican members of



the Committee on Public Works have insisted that any increase in the funds authorized for Federal grants must be used to accelerate needed construction by offering an inducement to the States to participate in the cost of treatment plants.

H.R. 16076, as reported by the committee, accepts this principle. It contains substantial inducements to the States to participate in the cost of projects under both the accelerated existing program and the proposed clean rivers program. Thus, if a project is a part of an approved plan for a river basin, coastal waters, bays, or lakes, it is eligible for an incentive grant of 10 percent above the basic 30-percent grant, and with no dollar limitation. The grant also may be increased by an additional 10 percent if the State agrees to contribute 25 percent for all projects under this program. This provision for incentive grants will bring the States more actively into the program, will reduce the need for future Federal funds, and will encourage local communities to provide adequate sewage treatment facilities.

Certainly the amounts that are made available for Federal grants must bear some relationship to the ability of the States and local communities to utilize such grants. The amounts which would be authorized by this bill are, we believe, the maximum that can be used wisely. Moreover, a massive Federal program could hinder rather than help the overall effort by encouraging the States and local communities to believe that the Federal Government has taken over the water pollution problem and little or no effort on their part is required.

This bill, aside from providing for basin planning, is primarily an expansion of the existing Federal program of grants for construction of municipal sewage treatment plants. It does not attempt to solve the pollution problems that arise from the many sources unrelated to municipal sewage. Thus, the cleaning up of the rivers of the Nation unrelated to the treatment of municipal

sewage will be the result of the pollution abatement enforcement provision and requirements for water quality standards in the existing law.

Through the adoption of my amendment, the committee has in this bill laid the foundation for possible future legislation that could provide for additional pollution control and abatement. Under section 211 of this bill, the Secretary of the Interior is directed to conduct an investigation and study of methods for providing incentives to assist in the construction of facilities and works by industry to reduce or abate water pollution. This study shall include the possible use of tax incentives as well as other methods of financial assistance. The bill also provides for 70 percent Federal grants for research and demonstration projects for prevention of pollution of waters by industry. These provisions are highly desirable. They may point the way to a future solution of the pollution problems created by industry. Such a solution must and will be found, and this provision is an important first step.

In this period of extreme inflationary pressures and excessive Federal expenditures, every proposed increase in Federal spending must be carefully considered. This bill would authorize the administration-recommended appropriation of \$2.45 billion for the fiscal years 1967-71. However, this authorization must be contrasted with the \$6 billion authorization for fiscal years 1967-72 which is contained in the Senate-passed measure. Moreover, it will fund a program that has been carefully devised to assist in solving a serious situation that demands immediate action. Under the provisions of this bill, the States, the cities and the communities will be encouraged to do their share in combating the common problem of water pollution.

I believe that the importance and the urgency of this task justifies the expenditure of the proposed fund. I, therefore, urge the enactment of H.R. 16076.

Mr. CRAMER. Mr. Chairman, I thank

the gentleman very much, and I yield to the gentleman from New York [Mr. GROVER].

Mr. GROVER. Mr. Chairman, I want to associate myself with what the gentleman from California just said. Coming from the trailblazing State of New York in the field of water pollution, I am thoroughly pleased to see the committee do what it has done. When I got on this committee several years ago there were very wide ranging differences in dealing with this matter of pollution. It has taken a great deal of persistence and patience on the part of the gentleman in the well as well as all of the members on this side and the other side of the aisle.

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That persistent patience has brought forth a piece of legislation here which will do great things for this country. I hope that the other body, when we get into conference on this bill, will realize the great pains that both sides on this committee have gone to to bring out a truly bipartisan piece of legislation.

Mr. CRAMER. Mr. Chairman, I thank the gentleman from New York.

Mr. BLATNIK. Mr. Chairman, I yield 5 minutes to the gentleman from Illinois [Mr. GRAY].

Mr. GRAY. Mr. Chairman, I thank the distinguished subcommittee chairman [Mr. BLATNIK] for yielding me this time, and I want to take the opportunity to commend the very able and outstanding gentleman from Minnesota as well as the chairman of the full committee [Mr. FALLON], and the ranking minority member [Mr. CRAMER], for doing an outstanding job on this bill. I know of no piece of legislation before the House that has been more thoroughly discussed in hearings and in the markup of the bill than has the bill presently pending before the House. It is a good piece of legislation and the country needs it badly. I urge all of our colleagues to vote in the affirmative on this very important piece of legislation.

Mr. Chairman, and Members of the

Committee, this is a very important piece of legislation.

This bill would provide for the development of basin pollution control and abatement plans through the establishment of additional incentives; by increasing grants under the existing program for waste treatment; would provide reimbursement for projects starting after June 30, 1966; would authorize studies of cost estimates, additional State personnel, financial assistance to industry, research on industrial wastes, and estuaries; as well as other minor provisions.

This bill contains, in the judgment of our committee, those features which are now necessary to accelerate as much as possible the water pollution control program. It increases the Federal participation more than seven times. It introduces a new concept of incentives which will move the program forward that much faster.

It is the first bill to attack the problem with the amounts of money commensurate with the size of the job to be done.

Mr. Chairman, several proposals were pending before the committee which were considered. The administration proposal provided for \$3.45 for construction grants for the 6-year period 1967-72. The bill as passed the Senate provided \$6 billion for the 6-year period 1967-72. The present bill reported by the committee provided \$2.45 billion for 5 years.

The committee, in arriving at the total figure of \$2.45 billion, made a careful analysis in its efforts to arrive at a figure which would more realistically lie in the same range as the amounts which could actually be used over the next few years. Available information indicated that there are not enough projects ready for the utilization of the sums contemplated under the Senate proposal, due partly to a lack of readiness in the completion of planning, design, and specifications, and partly to the fact that even when plans are completed the financial resources of the States or the local communities are not sufficient to supply their share in a

program in which the Federal Government would so markedly increase its participation.

The incentive grants provided for in the bill are based on two things: First, a new concept of an approved basin plan known as a *clean rivers program*; and second, State participation. Under each program there will be made available a 10-percent incentive grant, or a total of 20-percent incentive grant for participation in both programs.

In connection with research and development, the committee feels that this program has been strengthened by first, industrial research; second, estuarine research; and third, by including all research under one authority. The total authorization, which under the present law has no ceiling, has been set by the committee at \$75 million per year for the fiscal years 1967, 1968, and 1969, plus \$1 million per year for the same years for a new study of estuaries. The committee feels that every new avenue should be explored in the quest for solution of the many pollution problems this Nation faces, and waste problems require the active involvement of industry itself which has intimate knowledge of manufacturing and other industrial processing operations.

Mr. Chairman, the necessity for early and favorable action by the Congress on this subject is vital. In closing, I want to commend the very able and distinguished gentleman from Minnesota [Mr. BLATNIK], the subcommittee chairman and [Mr. FALLON], the full committee chairman, along with the gentleman from Florida [Mr. CRAMER], the ranking minority member, for their hard work on this bill. It has been a real pleasure to work with these distinguished legislative leaders in bringing out this important legislation. I hope it will pass overwhelmingly.

Mr. BLATNIK. Mr. Chairman, I want to join the gentleman in his comments and thank him for his splendid participation in our deliberations. I also want to thank all of the Members not only on

our side but on the other side for the splendid cooperation they have shown. Particularly, I wish to include the leader of the minority, the gentleman from Florida [Mr. CRAMER], and all of the members and staff on both sides. This is one of the finest examples of a joint effort on a major multibillion-dollar proposition that I have ever seen outside of the defense measures.

Mr. CRAMER. Mr. Chairman, I yield such time as he may use to the distinguished gentleman from Pennsylvania [Mr. KUNKEL].

Mr. KUNKEL. Mr. Chairman, I rise in support of this legislation to amend the Federal Water Pollution Control Act. I trust the bill will be approved overwhelmingly. Naturally, it contains many matters of detail giving rise to differences of opinion.

But in the broad, overall view, Mr. Chairman, this bill is an excellent one. In fact, it is the best approach—the most realistic approach—ever devised to grapple with the the most serious problem threatening the natural resources which sustain this great Nation. That problem is the pollution—the slow poisoning—of our sources of water supply—our lakes and rivers and streams, our underground basins. It involves the question of whether we are going to have enough clean water in future years to maintain a healthy and growing civilization—clean water for drinking, for industrial processes, for recreation and for agriculture.

At this stage, it is a problem which—more so than any other—has a direct and fundamental bearing upon the general welfare of our people and our future generations. Unless all levels of Government act to meet the challenge, our civilization is going to bury itself in the waste products of its own dynamic energy.

Mr. Chairman, the Federal Government has been concerned in meaningful ways in the field of water pollution control for 10 years. This is the fourth major step the Congress will have taken in this field since 1956. It is often said

that the third time is the charm. It is not my intention to downgrade the Water Quality Act we put on the books last year. That was good legislation. It was the third step taken by the Congress. But in this case, I believe, we must say that the fourth time is the charm.

It is not that the bill before us is a cure-all. It certainly is not that. There are phases of the problem which it still leaves virtually untouched. Industrial pollution is an example. The bill does recognize those additional aspects, of course, and lays groundwork for future action. It is well to remember, in that connection, that Rome was not built in a day.

Nor can we say this legislation goes as far as it might even in the fields where its greatest strengths lie. Some say much more money should be authorized to assist in the construction of sewage disposal and treatment works. Others say that, for the immediate future, not a great deal more money could be spent, anyway, because our public agencies, our planners and builders, are not yet geared to do so. I am inclined to agree with the latter view.

But the important thing, Mr. Chairman, is the approach taken by this bill. For the first time, I believe, we are really coming to grips with what has to be done. It is an approach which says that, whatever else we do about water pollution, we are not actually going to be on the road toward a solution until we start, in earnest, to build the plants and the facilities that are needed for the proper disposal of wastes.

It is impossible for me to visualize how we can have a strong and prospering America 20 or 30 or 50 years from now unless this building job is done. In comparison with that, all of the dictums issued from Washington—all of the judicial decrees—all of the declarations of outraged indignance—will mean little or nothing.

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Mr. Chairman, last year the Water

Quality Act became bogged down for a time in the legislative process. The quarrels then were over complex questions of establishing and enforcing water quality standards.

At that time, it was my observation that a much more important question involved the building job that needs to be done. I remarked:

We are not going to get very much pure water . . . by sitting on the riverbank counting the bacteria floating by.

Certainly, I do not mean to say we should not have standards. We do need goals and objectives to shoot for. They help to place the problem in perspective. They remind us how much more must be accomplished. In that respect, I think a quite suitable compromise was reached last year. It encourages—almost forces—the States themselves to undertake the task of establishing quality criteria on interstate waters by next year. It has the virtue of practicality. It places the major responsibility for setting these goals in the hands of those who best know the obstacles to be overcome. It has the additional advantage of coaxing the States into a more fruitful partnership with the Federal Government and the local communities in the field of water pollution control.

But, in my estimation, there was another provision of at least equal importance in the bill enacted last year. That was the one increasing by 50 percent—to \$150 million a year—the amount available for construction of municipal sewage treatment facilities. This was a breakthrough. Indeed, there was support for it, originally, neither from the White House nor in the other body. It was here in the House where it was hammered out. It signified the dawn of a new day. It was the first real act of recognition of the immense task confronting us.

This new legislation now before us is a reaffirmation of that. It carries the principle further. It takes the next great stride that must logically follow. Of

course, there are those who will say this is just another case of the Federal Government doing nothing more than throwing money at a problem. They have a perfect right to that opinion. I would not deny for a minute that the Congress has done a number of things which, to my way of thinking, amounted to not much more than that.

But I believe there are three aspects of this legislation on which such criticism founders.

First. It must be obvious by now that we are not going to clean up our rivers and streams—and our other sources of water supply—without spending a considerable amount of money. A figure of \$100 billion often is cited as the cost to all agencies—public and private—of doing the job by 1972. When all sources of pollution—and all remedies—are taken into account, the cost could be much higher. I have heard estimates ranging all the way up to \$250 billion.

Second. This bill makes a great effort toward encouraging additional expenditures by the States and local communities. This is far from a case of the Federal Government throwing money around indiscriminately—or shouldering the burden alone.

As a basic rule of thumb—in the municipal waste treatment program—Federal funds make up 30 percent of project costs, local funds 70 percent. Under this bill, the Federal share will increase to 40 percent if there is a contribution by the State amounting to 30 percent. In addition, under the provisions encouraging joint development of areawide plans by agencies within the same river basin, there will be the same incentive of an additional Federal contribution of up to 10 percent for approved projects. With State participation amounting to 25 percent, the Federal share could go up still another 10 percent—to 50 percent—under the basin plan.

Undoubtedly, these incentives will foster a greater financial effort by the States. How much so—and whether it

will be sufficient—are questions yet to be answered. Despite past attempts along this line, only 12 States are now providing assistance for municipal waste treatment projects. Additional methods of encouragement may have to be devised and tested in the future. Obviously, we must rely heavily on the States and local agencies to carry the larger share of the burden. The approximately \$700 million spent by the Federal Government on this program since its inception in 1956 may sound like a huge sum of money. But we must remember that it is only about one-fourth of the amount that the States and local communities have spent on these projects during the same period.

A third factor that places the proposed new money authorizations in better perspective is this: The House bill is the most conservative of all proposals that have come before the Congress this year. For the waste treatment program, it totals \$2,450 million for 5 years. The administration originally proposed a \$200 million ceiling for fiscal 1967 but unlimited amounts thereafter under the basin plan. Then it came back with a revised request for \$3.45 billion for 6 years. The Senate bill seeks \$6 billion for 6 years.

But even as conservative as the House bill is, it calls for expenditures over a 5-year period more than three times greater than would result if the program continued at its current rate. Moreover, the authorization would increase year by year until—in 1971—it would be more than six times higher than the 1967 level. If this is not accelerating the program with a vengeance, I do not know what it is.

But, Mr. Chairman, there is still the question: Is there any assurance that even this amount of money can be utilized? For we must consider that not only would the availability of Federal grants grow almost geometrically; there must also be the presumption that the States and local communities will be able and willing to increase their expenditures in practically the same proportion. Certainly we hope they will. We must

do everything to encourage it. But this is where the catch is. It is going to take time for the States and local communities to "tool up" for such a job. They must prepare plans, make financing arrangements. They are going to require taxpayer support.

The availability of materials and qualified contractors may be another limiting factor.

The report of our Public Works Committee states that the \$2.45 billion figure "is in itself somewhat optimistic, since it actually exceeds the amounts that would be obtained if a truly mathematical projection was made of the data now available on local capabilities and on the status of planning."

Undoubtedly, if we are to lick the pollution problem, greater expenditures are going to be required. Indeed, it is likely that the authorizations in this bill, if enacted as proposed, will be raised before they run their course. At least it is to be hoped that the circumstances will warrant it. But they should not be raised merely to figures picked out of the air. The determinations should be based on much harder evidence—on much more extensive information—than we have been shown to date.

For the purpose of gathering such data, this bill contains a most valuable provision. It authorizes the Secretary of the Interior to make a study of the national requirements and the costs involved in cooperation with the various pollution control agencies. The Secretary will submit the initial study to the Congress by January 10, 1968. It will cover a 3-year period beginning July 1 of that year. The study will be updated every year thereafter. As a method of keeping on top of the problem—as a spur to greater efforts and as a means of keeping our objectives in front of us—this is a vital provision.

Returning to my central point, Mr. Chairman, I believe this bill places us on the right road. It begins fully to recognize the enormous building job that must be done. I hope this will be held in mind

as we pass this bill—and that it will remain a primary guiding principle when the Congress moves on to additional enactments in the field of water pollution control in future years.

Mr. Chairman, much has been said about the urgent need for greater cooperation and joint efforts among the Federal Government, the States and the local agencies in this field. Much has been said and done about controlling the sewage and household wastes of our cities and towns. These needs and problems fall most naturally into the public sector. As a result, they have received the greatest attention of the public and of all levels of government.

There are additional problems that have received far too little attention—despite the fact they are major contributors to the pollution of our water sources. These include the chemical wastes from our industries, the radioactive pollution resulting from the mining and processing of radioactive ores and the minerals and pesticides and other materials washed into rivers and lakes from our farmlands.

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By far the most serious problem among these, nationally, is that of industrial pollution. In many places in this country where sewage is adequately controlled, streams and rivers nevertheless have been poisoned and made unfit for any kind of beneficial use—by the wastes from manufacturing processes alone. These pollutants are too seldom captured by municipal disposal systems and too often turned loose wholly untreated. By and large, proper treatment and disposal of industrial wastes is an unprofitable and money-losing proposition. In many cases, workable methods have not even yet been discovered.

So besides the requirement of a more active partnership among the various levels of government, there is also a crying need for a similar working relationship and cooperation between government and industry. By comparison

with what it does in the field of sewage treatment and disposal, this bill can be criticized for doing too little about industrial pollution. However, it does take two important steps toward correcting this.

First, it authorizes research grants for the purpose of finding and developing new methods of handling industrial wastes. This research will not be limited to the technological phases of the problem. It may also delve into the question of devising practical and equitable means of financing treatment works. A tremendous amount of work remains to be done in these areas before a massive attack on this problem can be launched on any sure-footed and fair and reasonable basis. Out of a total of \$75 million in each of the next 3 years for water pollution research, the bill allots not less than a fourth of that amount for industrial research and demonstration projects.

The second step taken in this field is one that could lead to effective action in the more immediate future. It authorizes the Secretary of the Interior to make a complete study of all possible financial incentives for encouraging industries to install and construct facilities to reduce or abate water pollution. This study will lay the foundation for any legislation the Congress may enact in the future to provide such incentives.

In the past number of years, many suggestions along this line have been offered in the form of bills introduced in the Congress. But these bills have died. I have detected a growing feeling in this Congress, however, that the time has arrived for putting this type of program into effect. A start must be made along this path.

Incentives most often suggested have taken two forms. One is a tax credit by which a certain percentage of the cost of pollution control facilities could be deducted from a corporation's income tax liability. The other likewise would lighten the tax burden by providing accelerated depreciation on facilities of

this nature. There are other approaches that could be taken, all the way up the line to grants and low-cost Government loans.

Mr. Chairman, I believe little doubt remains but that industry must be brought in the picture, by some such means, as a more active participant in the fight against water pollution. Hopefully, the contemplated study will produce an effective way of doing this.

Certainly, at present, there is no compelling reason for it to happen. Pollution control equipment is costly. In virtually every case, it is nonproductive and unremunerative. It is nigh on to impossible to justify this kind of expense to corporation stockholders interested in profits. It is true that many companies have expended large sums for this purpose. But there is a limit as to how far industry can go in serving goals lying almost exclusively within the realm of the public interest. Somewhere along the line, we have to recognize that it is a two-way street.

Earlier this year, I received from Armco Steel a most instructive analysis of this problem as it relates to that corporation's own situation. Since 1950, Armco has spent \$16.9 million on air and water pollution control facilities for its nine plants across the country. The cost each year of operating these facilities is \$1,560,000. Insofar as the corporation's own fiscal picture is concerned, this is money that has gone almost entirely down the drain. This equipment does not contribute directly to production. There is minimal recovery of usable wastes.

Moreover, to meet all of the various air and water pollution standards, Armco would have to spend \$65 million in the next 5 years on equipment. Its annual costs of operating these facilities would go up another \$6 million. There would be no return on the capital investment and little return on operating costs. To put it mildly this does not shape up as a profitable adventure for Armco.

When information like this is pro-

jected nationwide, we can begin to see the astounding task confronting us in the industrial field alone. Establishment and enforcement of pollution standards is one of the ways of striving toward a solution. Under Federal law, for example, abatement proceedings can be brought against an industry whose wastes pose a health hazard in a neighboring State. This places the entire burden of a solution upon the industry itself.

But there is a definite limit to this. In my mind, it is questionable whether such a tool can be effective unless it is combined with a whole battery of other remedies. If an industry finds it too costly to operate in one area as a result of certain standards it is expected to meet, it can pick up and move to another area where the circumstances or the standards are different. That, or it might go out of business if it is in a marginal situation. When it comes down to a choice between enforcing standards and preserving the jobs that are the lifeblood of a community, it is the latter that is likely to win out. The public interest, it should be noted, can work in all sorts of fascinating ways.

In the last analysis, the wonderful—and, of course, often troublesome—wheels of progress are not going to be stopped by paper laws. In the absence of any other reasonable give and take between Government and industry, abatement proceedings based on pollution standards will tend to break down under the pressure of that progress—and under the ravenous need of our economy to continue expanding and providing more and more jobs, come what may.

So, Mr. Chairman, we come back once more to the crux of the problem. Again I submit that is the tremendous building job we must do. The public interest, in my estimation, undoubtedly will require that we provide incentives for industry itself to help do that job. It will require that we build more and more public facilities to handle not only industrial wastes but pollutants of every other kind.

Time is short. Our supplies of clean water are running short. It is estimated that by the year 2000, this country will require 1,000 billion gallons of water every day to serve its needs. Present and contemplated developments will provide only 650 billion gallons. It is obvious that, to a much greater extent than at present, this will require reuse of the same water. Much of it will have to be used over and over and over again.

In view of that, the pollution of this natural resource will become more and more intolerable. Even now, it threatens the health and livelihood of people in many areas. It is spoiling fully a fourth of the pure water we currently need for purposes other than irrigation, industry and power generation. It is turning once beautiful streams and lakes into virtual sewer drains and cesspools.

Undoubtedly, the most repulsive example is Lake Erie. Not long ago, Lake Erie was a sparkling blue body of fresh, clean water. Now it is leaden and almost dead, choked by wastes from five major cities, practically stripped of any recreational value and able to support only a small fraction of the fishlife it once did. It is said that even if all of the rivers flowing into it were completely freed of contaminating material, it would still take some 20 years to flush Lake Erie clean.

The other Great Lakes face a similar fate unless the most stringent measures of pollution control are effected. The cost of cleaning up these lakes already is placed at \$20 billion.

A final point I wish to make is this: Roughly speaking, every dollar spent for pollution control ultimately will be a dollar saved from the cost of water development and distribution. Every gallon saved from the poisoning of our wastes is a gallon that will not have to be obtained by other means.

Most assuredly, water development for this country cannot afford a backward glance. It must proceed with all of the speed and resourcefulness at our command. No matter what we do, this Na-



tion is going to be caught in a close race between supply and demand. Our burgeoning population—the soaring needs of industry and agriculture—make that a surety.

One of the great hopes in this field is in the desalination of sea water. Much progress has been made since the first saline water demonstration plants were authorized in 1958. But the output of these plants still is far from competitive with our traditional sources of supply.

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In the not too distant future, hopefully, converted sea water should be a boon for our coastal cities. Before that happens, of course, the cost must be reduced dramatically. The research necessary to that must be accelerated.

Above all, more efficient distribution of the water resources we already have is imperative. The transport of water from areas of surplus to areas of shortage is making rapid progress. More will have to be done. But even in this field, we must hold in mind that—as our population grows and spreads—areas now having a large surplus of water may someday be facing shortages.

Possibly, in the distant future, it will be necessary to import supplemental water supplies from sources far outside of the United States. This may become imperative not only from the consumption standpoint alone. A factor just as important may be the need for enormous amounts of clean water constantly to freshen our lakes and rivers—and most particularly our underground basins.

This is the significance of the North American Water and Power Alliance proposal to bring water from the great rivers of northern Canada and Alaska. This plan is estimated to cost \$80 billion and to require 30 years to complete. Great difficulties are inherent in it because of the international arrangements that would have to be made and the concessions that might have to be granted. In some circles, it is viewed as

a pipedream. But as our problems of water supply and pollution mount in future decades, it could be one of those pipedreams that comes true.

On the other hand, Mr. Chairman, we cannot put too much reliance on any one approach. Only at the risk of deluding ourselves can we expect to be forever reaching out for new sources of water where the grass seems greener. At little or no more expense, we can salvage vast amounts of the water we need right here at home. We can and must get the best possible use out of what we already have.

Beyond these practical considerations, this Nation's water resources are a heritage we are obligated to preserve. They constitute a magnificent asset we must treat with care if the hopes we hold for our future generations are to materialize. We have a tremendous building job ahead of us. I urge the passage of this bill so that we can get on with that job.

Mr. CRAMER. Mr. Chairman, I yield 3 minutes to the gentleman from New York [Mr. HORTON].

Mr. HORTON. Mr. Chairman, I welcome this opportunity to add my support to H.R. 16076, which provides the comprehensive additions and amendments to the water pollution control program. I, too, want to commend the gentleman from Minnesota, the chairman of the subcommittee, and the gentleman from Maryland, the chairman of the full Committee on Public Works, and the gentleman from Florida [Mr. CRAMER], and particularly the gentleman from Alabama [Mr. JONES] for their work in making possible this very comprehensive bill which is presented to us here today.

As ranking minority member of the Natural Resources and Power Subcommittee of the Government Operations Committee, on which I have the privilege of serving with Chairman ROBERT E. JONES, I know how massive and how difficult the problems are in the pollution field. The bill as reported by our Public Works Committee reflects an understanding of these problems, and a deter-

mination to deal with them promptly and positively.

I especially want to applaud the committee's inclusion of a comprehensive program for research in pollution abatement technology. I am pleased that the provisions of my bill, H.R. 17576, providing for 70-percent grants for research into methods of controlling industrial pollution, have been included in the measure that is now before us. Under this program, \$75 million is authorized for antipollution research for each of the next 3 years. Twenty-five percent of this money is earmarked for industrial research.

While there is no question that industry is responsible for much of the water pollution we are faced with, it is also evident that the research and vast financial outlays required to eliminate industrial pollution cannot be provided by industry alone. Further, there is serious doubt, as evidenced by recent hearings of the Committee on Science and Astronautics, that the technological tools needed to solve this problem are sufficiently developed. Thus, it is doubly important that we provide adequate aid for industrial research which is needed to develop these methods and equipment, and to bring the solutions within our reach. I hope that my colleagues will give their full support to this crucial provision of H.R. 16076.

I also support the section of this bill which raises the maximum allowable grant under the waste-treatment construction program from \$1.2 million to \$2.4 million. This will enable more municipalities to participate meaningfully in the grant program. Also, this bill raises the maximum allowable Federal participation to 40 percent where the State contributes 30 percent of the project cost. By lessening the burden on local taxpayers, this will enable many smaller cities and towns to participate in the grant program—particularly in States which, like New York, have established substantial antipollution programs. Previously, significant State

participation was not coupled with this additional Federal incentive.

As part of my duties on the Government Operations Subcommittee on Natural Resources and Power, I have taken part in hearings and field inspection tours in many areas of the Nation. These have revealed that cities and towns in every population category are faced with inadequate waste-treatment facilities and inadequate funding to provide them. The bill, which recognizes the value of close cooperation with States and localities in solving the pollution problem, will enable millions more American citizens to reap the benefits of our enlightened Federal attack on pollution, through positive and prompt corrective action on the local and regional level.

Mr. Chairman, it was my intention to propose an amendment to the bill here today. In particular I wanted to talk in terms of assistance to industries through grants for industrial pollution research. While this program will help all industries overcome contamination of natural resources, I want to point out that many companies across the Nation are already spending large sums of money to control the quality of their effluents into our lakes and streams. Much of this effort on the part of these companies has gone uncredited, but industry in general has been doing a fine job in meeting its immediate responsibility to help in the cleaning up of our waterways. They have done their share to combat pollution. This also applies to many of the small firms. Earlier this year I introduced H.R. 17170, which provides for a program of public recognition of industries and municipalities demonstrating excellence in pollution control. Under this program the Secretary of the Interior would set up standards under which such recognition awards would be given.

The awards are not financial, but symbolic. The Secretary would award a flag or certificate of suitable design—perhaps depicting a clear drop of water—to each industry, city or town which qualifies

under these standards.

At the same time that certain municipalities and firms are criticized for their failure to take action to reduce or eliminate their contamination of public waterways, we must foster a positive public attitude toward those who have willingly and eagerly accepted their responsibility to society and who have taken adequate corrective action.

This program will provide an incentive to industries and municipalities. On the date the Secretary makes an award, a public announcement would be made, and the President and the leaders of both Houses of Congress would be informed. The recipient is authorized to display publicly the flag or certificate, and may include the flag insignia and the fact that the award was received in its advertising or other material which is publicly distributed or broadcast. Thus, recipients will be publicly singled out as leaders in the pollution abatement effort.

There is considerable precedent in Federal history for such a recognition award. The Defense Department awarded an "E" award to war production plants which made exemplary contributions to the war effort during the early 1940's. Last May, the President named a "Small Businessman of the Year" to a deserving recipient to demonstrate the importance of and opportunity for small business in the United States. During the war, the Maritime Commission awarded an "M" pennant for superior production records. The Bureau of Mines successfully used a stamp of its approval to promote the use of safe mining equipment.

The battle against water pollution is one of national scope. It makes sense to couple our research and construction grant programs with an incentive award program to cities and companies which have exemplary records in waste treatment and pollution control.

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The idea for this program came up during a brief stop on a helicopter pollu-

tion inspection tour which our Subcommittee on Natural Resources and Power took in the eastern Great Lakes region. During a stop at Sodus Point, N.Y., I talked with Mr. Leonard C. Schlee, Wayne County clerk, who expressed concern about the negative public attitude that is building up around the pollution fight. It was he who suggested to me the analogy between a pollution awards program and the Defense plant "E" awards during the war. After further discussion with local officials, representatives of industry, and other Members of Congress, I decided to put his suggestion in the form of a legislative proposal.

Since my introduction of H.R. 17170, Congressman JAMES HANLEY, of New York, and JIM WRIGHT, of Texas, have sponsored similar measures, and the idea has received praise from many sources.

Mr. Chairman, as I previously stated, it was my original purpose to offer this as an amendment today. I did offer this bill in August of this year. I feel that we have not had an opportunity as yet to take a good look at the potential involved so that we, perhaps, could make this legislation even more effective.

Mr. Chairman, I would like to ask the distinguished gentleman from Alabama [Mr. JONES], chairman of the Natural Resources and Power Subcommittee of the Committee on Government Operations, on which I serve, to comment upon this subject matter.

Mr. JONES of Alabama. Mr. Chairman, will the gentleman yield?

Mr. HORTON. I am delighted to yield to the gentleman from Alabama.

Mr. JONES of Alabama. Mr. Chairman, the gentleman from New York [Mr. HORTON] is, as the gentleman said, a member of the Subcommittee on Government Operations, a member who has been with the committee during its holding of hearings throughout the entire country.

Certainly, Mr. Chairman, no one has been more diligent than has been the gentleman in attending these hearings,

and based upon the experience which the gentleman has compiled, a bill such as he describes certainly in my opinion possesses merit.

The CHAIRMAN. The time of the gentleman from New York has expired.

Mr. CRAMER. Mr. Chairman, I yield 1 additional minute to the gentleman from New York.

Mr. JONES of Alabama. Mr. Chairman, will the gentleman yield further?

Mr. HORTON. I yield further to the gentleman from Alabama.

Mr. JONES of Alabama. Mr. Chairman, I do believe that the subject matter contained in the gentleman's bill, however, will require careful committee consideration. Consequently, I wish to assure the gentleman from New York that insofar as I am concerned, as a member of the committee, we certainly intend to take up his proposal and explore the entire subject matter of his bill.

Mr. HORTON. Mr. Chairman, I thank the gentleman from Alabama [Mr. JONES] for his comments.

Also, Mr. Chairman, I might say that I have spoken with the chairman of the committee, the gentleman from Minnesota [Mr. BLATNIK] and the gentleman has indicated his willingness to have the committee take up this proposal at the meetings of the committee during the next session of Congress.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. HORTON. I am delighted to yield to the gentleman from Minnesota.

Mr. BLATNIK. Yes, this is a matter that certainly ought to be and should be studied, but we need more time during which to do it. However, I believe it is too early right now, but I am very hopeful that we can give it adequate consideration next year.

Mr. HORTON. Mr. Chairman, I thank the distinguished gentleman from Minnesota.

Mr. BLATNIK. Mr. Chairman, I yield 5 minutes to the gentleman from Ohio [Mr. SWEENEY].

Mr. SWEENEY. Mr. Chairman and

Members of the Committee, I, too, would like to join the very laudatory comments of this afternoon as they bear upon the service of our distinguished chairman of the Committee on Public Works, the gentleman from Maryland [Mr. FALLON], the chairman of the subcommittee, the gentleman from Minnesota [Mr. BLATNIK], and the gentleman from Alabama [Mr. JONES] and certainly, Mr. Chairman, the outstanding chairman of the minority, the gentleman from Florida [Mr. CRAMER], for their unity of purpose and the cooperation that they have displayed within the committee and on the floor in bringing to the House a bill, a water pollution abatement bill, which is one of substance and which will certainly prove to be a historical landmark in our effort, in the great national effort, to obtain clean water.

Mr. Chairman, although there are many areas of needed research in the water pollution control field, clearly the one having highest priority is that dealing with development of new and improved technology relative to the treatment of wastes and renovation of waste waters. New treatment methods must be developed for handling wastes from all sources. Laboratory research has demonstrated that it is now scientifically possible to take any waste water and convert it to a quality suitable for reuse. There is, however, a big step from laboratory research to the actual application of these results. It requires pilot plants, field evaluation and demonstration units which are quite costly. The Water Pollution Control Administration has already developed several waste water reuse systems up to the pilot scale.

There is no question that one of the most effective and sound ways of providing the necessary water realization of our water resource potential will be through the mechanism of total pollution control which is the objective of the expanded research program which we are recommending.

Presently available waste treatment

techniques are proving increasingly inadequate to deal with the pollution problems currently facing our Nation. They will certainly not meet the need of the future. The Federal Government must take a leadership role—developing these new techniques and must demonstrate them on a plant scale basis. As with any innovation, a considerable amount of risk is involved. Since the benefits of these new findings will be shared by our Nation as a whole, it is quite appropriate that Federal funds be used for this purpose. Many municipalities and industries cannot afford the risk capital involved in developing and proving these new techniques.

There are other important research and development needs for which increased funds are necessary and will be provided in this bill. More effective methods are needed to measure and predict the long range effects of pollutants on all our water uses—municipal and recreational water supplies, industrial water supplies, agricultural water supplies, and propagation of fish and aquatic life.

We must have a vigorous research and development program to deal with wastes from dispersed sources which are not readily collectible for treatment. Techniques for control of pollution at its source must be given increased emphasis.

During the next 5 years, billions of dollars will have to be spent on waste treatment facilities for both municipal and industrial wastes for the problems associated with combined sewage, and for the provision of low-flow augmentation. We must carry out an effective research and development program to provide needed answers for efficient and effective pollution control.

Furthermore, it is essential that we mass the required scientific research resources needed to solve our growing water pollution problem. The in-house capabilities of the Federal Government must be supplemented by the industrial and university research resources of our

country. The amendments to the Water Pollution Control Act would provide the necessary funds and authorization to proceed with a vigorous research and development program to solve our water pollution problems.

The bill provides a substantial increase in the funds authorized for research. In addition, it adds a specific provision designed to encourage industrywide research on the treatment of industrial wastes.

Mr. Chairman, I am pleased to support this bill.

Mr. BLATNIK. Mr. Chairman, I yield to the gentleman from New Jersey [Mr. HOWARD], a member of the committee, 5 minutes.

Mr. HOWARD. Mr. Chairman, I rise in wholehearted support of the bill, H.R. 16076.

Mr. Chairman, I would like to mention my appreciation for an exemption that was made with respect to the procedure to be followed in the case of regional agencies such as the Delaware River Basin Commission and the Tennessee Valley Authority. These agencies are already directed by law to adopt comprehensive water resource programs for their constituent States. The language [p. 24608]

approved by our committee makes it possible for these agencies to submit pollution control programs directly to the Congress for approval, rather than to the Secretary. This is a compliment to the fine work that has been done in the past by the Delaware River Basin Commission and to our distinguished colleague, the gentleman from New Jersey [Mr. THOMPSON], who commended that work to the attention of the committee. The Commission and the residents of the Delaware Valley are fortunate to have such a forceful spokesman to present their cause.

It is due to his efforts that the residents of Sussex, Warren, Hunterdon, as well as the counties of Mercer and Burlington are so well represented here in this Congress.

Mr. BLATNIK. Mr. Chairman, I yield 5 minutes to the gentleman from New York [Mr. McCARTHY].

Mr. McCARTHY. Mr. Chairman, I just want to compliment the committee and say that this is a step forward in water pollution control legislation. I think this is an excellent bill. It means in 5 years we will be moving from the level of about \$100 million annually to close to \$1 billion annually.

But, Mr. Chairman, along with the "seven young Turks" on our committee who signed separate views, I am disappointed that the bill does not go far enough.

I believe that water pollution is the most urgent domestic problem facing our country. The other body, by vote of 90 to 0, passed a 6-year, \$6 billion bill, and I would hope that after the conferees meet that the House will soon find itself voting for a conference report containing something more than we have in this present bill. There is a great deal of sentiment here in the House for more money. Members recognize that this is a very urgent, if not the most urgent, domestic challenge we have. I would hope that the conferees will come out shortly with a somewhat larger amount.

Mr. BLATNIK. Mr. Chairman, I yield 5 minutes to the gentleman from Pennsylvania [Mr. BYRNE].

Mr. BYRNE of Pennsylvania. Mr. Chairman, one of the most important problems facing the people of Philadelphia today is water pollution control. Philadelphia has taken many important steps toward reducing pollution in the Delaware and Schuylkill Rivers. We have been working closely with U.S. Geological Survey in developing instruments to set up automatic testing stations on the Delaware River to determine the quality of waters.

We have put up substantial funds in the actual development and construction of waste treatment works. Under our capital program, we are able to plan 5 or 6 years ahead. We have spent over \$180 million on water supply facilities,

and over \$300 million in sewers and disposal facilities. Three new sewage plants are under operation on the Delaware River.

Since 1946 the total cost to the city has been \$85 million for three sewage treatment plants plus intercepting sewers. If this had to be built today, you would have to add 25 to 30 percent for the cost.

Only a few days ago in a recent report to the Federal Power Commission, it was pointed out that the Delaware River Basin has a great undeveloped potential for lessening water shortage and for hydroelectric power. Let me say that I fully agree with the members of the House Public Works Committee that the best answer to water shortages in the East is to use and reuse water. This only points up the importance of the pollution control program and the bill before us today. I am pleased that the committee saw fit to employ the Delaware River Basin Commission as the responsible agency to deal with the pollution problem—section 209 clearly states this.

Undoubtedly, H.R. 16076 will be very beneficial to Philadelphia and the Nation because it firmly commits the Federal Government to pollution control. I urge its passage.

Mr. BLATNIK. Mr. Chairman, I yield to the distinguished gentleman from Alabama [Mr. JONES] as much time as he might consume.

Mr. JONES of Alabama. Mr. Chairman, last year the Congress recognized that the problem of water pollution control constitutes one of the gravest domestic threats to this great Nation of ours and its vast resources. The Water Quality Act of 1965 was a milestone in history because it marked the first time in the Nation's history that we recognized the need to control the pollution of entire streams, not just segments of our waterways. That act was the beginning of the "river basin" approach to pollution.

We need only walk a few blocks and stand on the banks of the once unspoiled

Potomac to see what man has done to the stream. The stench of the pollutants permeates the air and is offensive to us. The Potomac, however, is not the only river in this condition. The Hudson, the Delaware, the Savannah, and many others all over this country are in this condition or fast approaching this stage.

What must we do to alleviate and even eliminate this problem? We must do two things.

First, we must establish without delay adequate water quality standards for our interstate streams and hopefully for all our waters. Last year's Water Quality Act requires the States to act by June 30, 1967. All 50 States have indicated an intent to do so.

Second, we must develop adequate plans to implement and maintain and improve the established water quality standards. The plans must be developed for the entire basin or a total watershed or a lake or our coastal waters. This is the thrust of the clean rivers restoration program authorized by this bill.

Many of our large cities have developed near our great rivers or lakes or coastal waters. These cities are dependent on these waters for many uses. Industry uses them. People use them for drinking, for boating, and for swimming. Even our fish and wildlife use them. Each of these cities is concerned with the effects of pollution on these uses. Most cities cannot afford a polluted stream. But some cities respond to the problem quicker and try to control their pollutants. All of them, however, pollute these waters in some way. The wastes of our community usually affect the other communities on the stream. Thus, it is important that the effects of all the communities on a waterway be coordinated. Again this is the thrust of the clean rivers approach.

This approach is new in the pollution control field. It is admittedly untried. The engineering and economic value of the basin concept is, however, not new. It is the first time that this approach has been used to stimulate State and local

participation in controlling pollution. The possibilities of this new approach are unlimited. Coordinated and unified efforts in attacking pollution are without a doubt the most logical way to accomplish our goal of cleansing the Nation's waterways.

The bill provides that if a basin lies entirely within one State, that is, it drains intrastate waters only, the Governor of that State may develop a basin plan. If all or part of more than one State is within a basin, that is, if the basin is drained by interstate waters, 50 percent of the Governors in that basin must concur in the plan. In all cases, it is expected that the local communities in the basins will participate in developing the plans.

Once the plan is developed it will be reviewed by the Federal agencies on the Federal level. The Governors would be expected to obtain the views of the affected communities.

Following this review, the Secretary of the Interior must review and approve the plan. In the case of the Tennessee River the plan will be developed and approved by the Tennessee Valley Authority. Similarly, in the case of the Delaware River Basin, the Delaware River Basin Commission, of which Secretary Udall is a member, will review and approve the plan. All of these plans must then be submitted to Congress for statutory approval.

The objective of the basin approach is clear and simple. It is to develop a unified approach to pollution control. We want to develop comprehensive plans for pollution control along the same pattern followed over the years in the field of water resources generally. To date, waste treatment has not been considered in terms of basin planning. The time has come to revamp our thinking and to try this new approach. It will not be easy, but this does not mean that it should not be done. In view of the present condition of the Nation's waters, the basin approach looms up as not only being highly desirable, but quite necessary.

The basin approach offers the communities increased Federal grants. The bill authorizes up to 40-percent grants for the construction of waste treatment works without any dollar limitations if a comprehensive pollution control and abatement basin plan is developed in a particular basin and approved by the Congress. In addition, the bill offers the communities another increase of 10 percent or a total of 50-percent Federal grants if a basin plan is approved and the

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State wherein the project is located pays 25 percent of the estimated reasonable project costs.

The principal objective of these increased grants is to stimulate and to intensify local and State action to develop a meaningful coordinated approach to pollution control. This basin approach also will encourage economies and efficiencies through adequate planning not just on a community-by-community basis, but on a basin basis.

In summary, this new basin approach to the pollution problem calls for basin planning and increased grant incentives and offers, as in the case of the existing law, an opportunity to shoulder more responsibility for cleaning up our Nation's streams. This approach combined with the opportunities offered industry by this bill will go a long way toward reclaiming our Nation's waters from the malignancy of pollution.

Mr. BLATNIK. Mr. Chairman, I yield to another distinguished member of our committee, our dear friend from South Carolina [Mr. DORN], such time as he may require.

Mr. DORN. Mr. Chairman, this is another outstanding piece of legislation which will go down in history. I commend each member of our committee for their united efforts to bring this bill to you today. I particularly commend my distinguished and illustrious colleague, the gentleman from Minnesota JOHN BLATNIK, who is now known throughout America as "Mr. Water Pol-

lution." This is another milestone in his great career. It is another milestone in the history of our great country and the modern-day dynamic progress of our people.

I wish to commend the chairman of my committee, the gentleman from Maryland [Mr. FALLON], and my great and beloved colleague, the gentleman from Alabama, BOB JONES. Mr. JONES has studied the rivers of this country from Maine to California, from Canada to Mexico. With the overwhelming passage of this legislation today, we can look forward to the day when the teeming millions in American cities will have pure water, when they will have recreation free of pollution.

Mr. Chairman, I can even foresee the day when our children, yours and mine, can wade and swim in the Potomac. This bill is a States rights bill; it is a bill with emphasis on local government; it is a free enterprise bill; it is a bill to promote harmony and cooperation between business and municipal, county, State, and Federal governments. This bill is for tomorrow. It is legislation for the future. I predict this bill will pass unanimously.

Mr. BLATNIK. Mr. Chairman, I yield to another effective member of our committee, the gentleman from Texas [Mr. ROBERTS] such time as he requires.

Mr. ROBERTS. Mr. Chairman, I rise in support of this amendment.

Mr. MINSHALL. Mr. Chairman, if an enemy attack or a sudden natural catastrophe had wreaked the devastation which now exists in Lake Erie, there would be no hesitation in declaring it a Federal disaster area. We would speed funds to the area without delay.

But the poison of pollution which is destroying our national water supply has been a gradually encroaching process, the urgency of which is only beginning to be the cause of widespread alarm.

We who represent the Cleveland area have been aware of it from the outset, coming as we do from the shores of the most badly polluted body of water in the



Nation. I have consistently voted for water pollution control since my freshman days in the House, in the 84th Congress, when I cast my first vote for the Water Pollution Control Act on June 13, 1956.

It is apparent that the efforts of Congress, working with the States and municipalities, still is insufficient to stem this tide of disaster. During the past decade I have seen more and more recreational beaches closed along Lake Erie, I have witnessed an alarming drop in commercial fishing, I have seen with my own eyes the insidious growth of algae in the lake, which today covers 4,000 square miles.

Lake Erie is the lifeblood of the industrial complexes which line it. It is the most important resource and asset of the State of Ohio.

As those who know my voting record are well aware, I am always cautious when I vote to spend the taxpayer's dollar. I have gained some note as an economy-minded Member of this House, even during times when it was considered popular to spend. But it would be false economy to vote against the authorization before us today. More billions and many of them will be required to do the job which so desperately needs to be done. The economy, the health and the welfare of too many millions of citizens depend upon our action today and our intelligent planning and funding for the future.

I wish to express my complete support of today's bill to increase funds available under the Federal Water Pollution Control Act.

Mr. FEIGHAN. Mr. Chairman, water pollution is our greatest natural resource problem today. It is a manmade scourge that threatens the future of many people, and perhaps our country. No matter how much we have tried to solve the problem—and we have tried more and more in recent years—it has not been enough.

I strongly urge passage of H.R. 16076, so that we may expand and accelerate

our attack upon this national problem, which affects us all. Unless we do that, our children might say that we did too little and too late.

The bill would make important improvements in the Federal Water Pollution Control Act. That act now authorizes Federal grants to municipalities to assist in construction of waste treatment works. In the last 10 years, Federal, State, and local agencies spent over \$3.8 billion on such works, of which over \$800 million was in Federal grants. But the backlog of needed treatment facilities, including obsolete facilities that should be replaced or supplemented, now requires the further expenditure of at least another \$4 billion. We are on a treadmill.

This bill would increase the \$150 million authorized for fiscal year 1967 for sewage works to \$300 million for 1968, with further increases up to \$950 million for 1971. We need these increases. They will benefit us all.

The bill would also liberalize the amounts that could be granted to communities for treatment works. It would double the present dollar limitation on grants for smaller projects from 1.2 to 2.4 million, and for projects serving two or more communities from 4.8 to 9.6 million. Under certain conditions the amount of the Federal grant could be up to 50 percent of the project cost.

The bill has other important features. One of the greatest sources of pollution is flow from combined storm and sanitary sewers. We have this problem in Cleveland, and in over 1,900 other communities. When these sewers were built, they had capacity for both rainwater and sewage. But population grew, while the sewage system capacity was fixed. So in heavy rain, sewage is washed into the surface waters, helping to ruin their quality. The act now allows the Federal Government to pay 50 percent of the cost of projects to demonstrate a new or improved method of controlling such discharges. The bill would allow the Government to pay 100 percent. We

need to find an answer to this phase of the problem.

The bill provides for strong Federal support for an accelerated program of research including for the first time grants to industry. If we are to succeed in solving the problem of water pollution control, we must have the help of industry. The Federal Government would bear up to \$1 million or 70 percent of the cost of research for any project that would have industrywide application. By stepping up research, we can evolve new tools and weapons and methods to carry out our national attack.

The bill has many other important and desirable features. It is a product of the careful, skilled, and dedicated work of members of the Public Works Committee, of which the inspired efforts of our colleagues, the gentleman from Oklahoma, BOB JONES, and the gentleman from Minnesota, JOHN BLATNIK, has been outstanding.

This legislation is of paramount importance to the future of our Nation. It would strengthen significantly our national program of water pollution control. We have no other course if we are to avoid national disaster.

Mr. HALL. Mr. Chairman, I have just learned that I may have to be off the floor of the House when the vote is taken on the water pollution bill. It appears there will be no opposition to this measure and that its passage is assured. Nevertheless, I want to make clear my support for this bill and the potential it affords for bringing us closer to the goal of clear, clean water. I have often said we must establish clear priorities in these times of deficit spending and, in my opinion, the priority which this bill deserves ranks far ahead of the measure which passed the House yesterday.

I am especially pleased that earlier today the House recognized the impor-

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tance of pollution control by extending an exemption from the suspension of the investment tax credit to those firms in

industry which seek to implement new pollution control measures.

Mrs. BOLTON. Mr. Chairman, I support H.R. 16076, as amended and reported by the Committee on Public Works. No more important single issue faces our country today than the problem of "good water." The steadily increasing pollution of the once-clear waters of the United States has become a problem of immediate concern to all citizens. The magnitude of this problem is so great that a solution must be found in short order, and such a solution will require the concerted action of all levels of government. We Clevelanders are, perhaps, more aware of this than others because of the condition of our own Lake Erie and Cuyahoga River.

The Federal Government has long played a leading role in the improvement of our rivers and harbors and has financed and directed irrigation and flood control projects since the early 1900's. However, it was not until 1956 under the Eisenhower administration that the first comprehensive Federal Water Pollution Control Act was enacted. Under this act, grants were made to States and interstate agencies for water pollution control activities, and to municipalities for the construction of sewage treatment works. Also, a permanent procedure for governing Federal abatement action against interstate pollution was established.

Although the 1956 act was a good beginning and laid a firm foundation for future action, it soon became apparent that, if this program were to be successful, there would have to be greater State financial participation in the construction of sewage treatment works. It was established clearly that Federal aid should serve as an inducement, rather than a substitute, for added State and local participation. H.R. 16076, as reported by the committee, accepts this principle. It contains substantial inducements to the States to participate in the cost of projects under both the accelerated existing program and the

proposed clear rivers program.

The provisions of H.R. 16076 are as follows: It provides \$2.45 billion for sewage treatment plants through June 30, 1971; it doubles the present dollar limitations on grants for smaller projects from \$1.2 to \$2.4 million and for projects serving two or more communities from \$4.8 to \$9.6 million; it would add an additional 10 percent to the present 30-percent Federal grant, making a total of 40 percent if the States contribute 30 percent; it would establish a new concept of incentive grants amounting to 10 percent for the development of basin plans for water pollution control; it would increase the total Federal grant by another 10 percent, or up to 50 percent under the basin plan, if the States matched to the extent of 25 percent of the total costs.

Another important provision of this bill lays the foundation for possible future legislation that could provide for additional pollution control and abatement. It directs the Secretary of Interior to conduct an investigation and study of methods for providing incentives to assist in the construction of facilities and works by industry to reduce or abate water pollution. This study shall include the possible use of tax incentives as well as other methods of financial assistance. A bill which I have introduced, H.R. 11866, would provide tax incentives for industry to meet this problem.

The pollution of our streams and waterways has been going on so long that we cannot expect a clean-up overnight, but we must make steady progress. Increased participation by the Federal Government along with State and local cooperation—made possible under H.R. 16076—should facilitate further progress in this area, in a partnership in which responsibility is shared.

Mr. FALLON. Mr. Chairman, without a doubt, the most perplexing and challenging feature of this very important legislation before the House Public Works Committee concerned the dollars

to be authorized for the increased grants offered by this bill for the construction of waste treatment works. The members of our Committee all agreed that the present pace of the construction grant side of the pollution control program is too slow. We recognize that more needs to be done and that there is a tremendous backlog of projects in this country today, not to mention the fact that in addition to the backlog we must be prepared to re-build projects that are now obsolescent and to build projects that will match population increases. But, even with this knowledge, we lacked adequate information to support most of the proposed dollar increases.

We were told that the Conference of State Sanitary Engineers 1966 study estimated, based on a comparison of 20 cities, that the backlog alone in needed waste treatment works was \$2.643 billion. The cities themselves, however, estimated that the true backlog is about 3.33 times the reported conference backlog or about \$8.90 billion. Such a wide discrepancy makes one wonder about the reliability of either of these figures.

The administration's revised proposal of last July 20 recommended a new dollar authorization of \$3.25 billion over a 5-year period beginning July 1, 1968. In addition, the administration's proposal would add an additional \$50 million this year.

On the other hand, S. 2947, as passed by the other body, authorized \$5.850 billion over a 5-year period beginning July 1, 1968. That bill did not change the amount of \$150 million authorized for this fiscal year.

The committee was of the unanimous opinion that a substantial increase in the authorization was needed this year. The members believed that the time had come for the Federal Government to make a meaningful and, in the face of the staggering proportions of the job to be done, a realistic commitment to participate fully in obtaining the President's and the Nation's goal of cleaning and

preserving "entire river basins from their sources to their mouths." The members of the committee clearly want the program to move at a swifter pace, but, let me emphasize, they did not want to turn this into a crash program. The job cannot be done overnight. Thus, the committee agreed to adopt the annual increments in the administration's proposal, except for the first year, but the committee limited the authorization to 4 fiscal years instead of the 5 years in the administration's proposal in S. 2947. The Committee added the \$50 million, which the administration included in this fiscal year, to the first fiscal year of this new authorization.

The committee's authorization of \$2.3 billion is the most reasonable estimate of the need. It will serve to stimulate the States and local communities into action on a much more accelerated pace, while at the same time it will not mislead them or lull them into the belief that the Federal Government is going to do the whole job. That is the message conveyed by the extremely accelerated increases authorized by S. 2947. We can ill afford to allow the States or the local communities to think for even a very brief period that the responsibility for pollution control now rests entirely with the Federal Government. This would be disastrous to the program. The States and local communities must continue to exercise the primary responsibility in the field.

Also, it should be remembered that this figure of \$2.3 billion in the House bill or the \$5.85 billion figure in S. 2947 is only an authorization. It is not an appropriation. With the increased costs of our foreign and other domestic programs, we cannot be assured that the actual appropriations will even approximate the annual authorization. Thus, we should not mislead the American people at this stage. To do so, would be courting a disaster which we cannot allow to happen.

Mr. BLATNIK. Mr. Chairman, I cannot agree more with the remarks of the distinguished chairman of the commit-

tee, the gentleman from Maryland [Mr. FALLON].

We have come a long way since 1956 in our fight against pollution. The public awareness of the parameters of the problem has grown tremendously in these short 10 years. The Nation's cities, once quite passive, to the problem now are exhibiting encouraging signs of a keen and urgent desire to conquer pollution as quickly as possible. These cities, big and small, are, however, under great financial strain. The demands on their budgets stagger the imagination. They want to do the job, but they need help. Thus, they have turned to the Federal Government. We cannot turn our backs to them. We must be responsive. But, we should not delude ourselves or the cities into thinking that large sums of money alone will accomplish wonders. There is no doubt that substantially more money is needed, but that is not all that is needed.

When the members of the committee considered the problem of dollar authorizations, it was necessary to look behind the figures presented by the sanitary engineers and the cities. We had to look at the capability—other than

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financial capability—of the cities to spend large sums, assuming appropriations approximated these large figures, in an effective manner. When we did this, we found that the cities had not yet "tooled up" for these sums.

One of the most important problems facing all cities of every size was the lack of adequately trained technical and professional people in the field of water pollution control. The Nation has made great strides in pollution control research in the last few years. We have concentrated our efforts in this area and in building waste treatment plants. But, to a large extent we have neglected a key element of effective pollution control, namely, trained personnel.

As we proceed on an accelerated pace—but not on a crash basis—we simultaneously create a need to intensify our

efforts in supplying adequate personnel. We cannot hope to operate waste treatment plants efficiently and effectively until we have trained competent people. Thus, without this key element, it is unrealistic and wasteful to expand our efforts too greatly.

The bill before you today authorizes the Secretary to make a complete investigation to determine the need for additional trained State and local personnel to carry out pollution control. The study must be completed by July 1, 1967. In addition, the Federal Water Pollution Control Act now authorizes grants to cover the cost of training personnel. The committee has urged the Secretary to use this authority to the greatest extent possible.

Another problem facing the cities was created last year by the Water Quality Act of 1965. That act requires the States to establish water quality standards by June 30, 1967, and, if they fail to do so, the Secretary of the Interior must act. The uncertainty concerning what those standards will be makes it difficult for these cities to plan effectively. While we would not want these cities to wait, we can appreciate the problem.

A third problem is research. There are many areas in the pollution control field that need further research, such as the problem of storm sewers. More research is needed in the field of industrial waters. Research should include the development of techniques for area treatment of wastes, either as combinations of municipal and industrial wastes or as combinations of industrial wastes.

The solids resulting from treatment of wastes pose problems, particularly in metropolitan areas where land is not available for solid waste disposal. The practice of haulage of solids for disposal into lakes or ocean can merely change the location of water quality impairment. Research is urged into means of reducing the amount of solids and into methods of disposal which improve the overall situation.

The committee also understands that

comprehensive studies have demonstrated the desirability of having more effective techniques to appraise the assimilative capacity of streams in order to better assess effects of increasing populations and industrial and agricultural usage. We believe that since the proper usage of such capacity is both an economic resource and an integral component in assessing water quality standards, demonstration projects to determine practical measuring and control techniques would be most desirable.

Also, since the objective of the pollution control program is to provide water of acceptable quality, research is needed to explore possible supplemental treatment techniques, and methods for treating the residual water quality problems which remain in areas where treatment facilities have been constructed. This would include methods which would permit harvesting algae and recovering silt from land erosion. Research is also needed to better define the water quality levels which do adversely affect those using the water.

H.R. 16076 provides additional research authority and funds which should be extremely useful in resolving this problem.

These are the problems facing the cities today. They are not insurmountable, but they must be considered in arriving at a dollar authorization that makes a meaningful Federal commitment to fight pollution and at the same time is not misleading.

Let me also emphasize, as my colleague, the gentleman from Maryland [Mr. FALLON], has done, that more reliable cost figures are needed relative to the national requirements under this program. We cannot effectively understand the scope of the problem until we obtain adequate cost data. The bill directs the Secretary of the Interior to submit this data for the 3-year period beginning July 1, 1968, to the Congress by January 10, 1968.

Again, let me urge passage of this vital legislation.

Mr. BROYHILL of Virginia. Mr. Chairman, I strongly endorse H.R. 16076. Those of us in northern Virginia at times tend to think of the Potomac as "ours." But the Potomac also belongs to the Nation. Likewise, the rivers, streams, and lakes of all sections of the country belong partly to Virginians. Pollution of any of our waters deprive all citizens of their usefulness and beauty, and I feel it is a necessary and appropriate Federal function to continue financial support of State and local programs to clean up our waters; to support research for improved means of preventing future sources of pollution; and to coordinate both of these efforts.

This bill is particularly commendable, I believe, from several standpoints. The authorization of \$2.3 billion for the next 4 years appears to be realistic in terms of what can actually be used during that period. The planning of many projects is incomplete, and State and local financial resources are reported to be inadequate to supply their share of a more comprehensive program. The increased grants in this bill should in time help to alleviate the latter situation. Future legislation can increase the authorization, if it is found desirable, after results of a cost estimate study required by the bill are evaluated.

The increased flexibility of the grant program provided by H.R. 16076 and the incentive grants for projects in approved river basin plans should effectively stimulate more State and local participation. I feel this is an important step forward. The incentive grant formula is designed to be equitable to projects both in and out of an approved basin plan. It is geared to induce rapid development of new plans in a manner which will not slow down old programs.

Since water pollution has become such a harsh enemy to our natural resources, we all, perhaps, wish we could pass legislation that could feasibly do more now—I do—but I believe this bill sets a reasonable course. I hope it is enacted.

Mrs. REID of Illinois. Mr. Chairman,

I support H.R. 16076, the Federal Water Pollution Control Amendment and Clean Rivers Restoration Act of 1966, because it is necessary legislation to further implement our efforts to meet a critical public problem which is growing in urgency every year. This legislation provides for reasonable acceleration of the current Federal grant program, includes greater State participation, encourages river basin planning, and authorizes research as to incentives necessary to reduce industrial, agricultural, and other types of pollution not related to municipal waste treatment programs. I am constrained to point out, however, that while this bill is definitely a needed and logical step in the right direction, it is not—as some might wish to believe—a Federal panacea for our entire water pollution problem. This task will continue to require the fullest cooperation of States and local governments as well.

There are few problems in America today as vital as our need for a present and future supply of clean, pure water. Not only does water pollution menace our public health, destroy fish and wildlife, and ruin natural beauty, it also adversely affects our manufacturing processes, reduces property values, and substantially raises our taxes. It is surprising to many to learn that the average individual in these United States daily uses over 60 gallons of water in his home. We are told, too, that if we were to prorate the amount of water used in our behalf by businesses, governments, and farms, on a per capita basis, it would amount to approximately 1,850 gallons a day—and by the year 2000, the rate will be 3,000 gallons a day for each person. It should be obvious to everyone, therefore, that as our population continues to expand, extensive reuse of our existing water resources in the future will be the rule rather than the exception; and we can expect a rising curve of water treatment costs to maintain essential quality standards.

As a member of the Committee on Public Works which has reported H.R.

16076, I feel that this bill will considerably assist in this ever-increasing effort to end the wasteful and unnecessary pollution of our Nation's most valuable natural resource. This bill, in my judgment, is an acceptable compromise of the several versions considered. Under this bill, there will be an increase in the maximum grants from \$1.2 million to \$2.4 million for individual projects, and [p. 24612]

from \$4.8 million to \$9.6 million for projects serving a combination of several municipalities—or 30 percent, whichever is less. The present Federal contribution of 30 percent, if the State contributes 30 percent to all projects in any one fiscal year, is raised to 40 percent. Thus, the bill provides for sufficient acceleration in the Federal grant program and includes a substantial inducement to the States to participate in the cost of these programs. This provision will bring the States more actively into the program, will hopefully reduce the need for future Federal funds, and will stimulate and encourage local communities to provide adequate sewage treatment facilities.

Likewise, if a project is a part of an approved plan for water pollution control and abatement in a river basin, coastal waters, bays, lakes, and so forth, it is eligible for an incentive grant of 10 percent above the basic 30 percent grant provided in existing law, with no dollar limitation. The Federal grant would then be 40 percent and may even be increased to 50 percent if the State agrees to contribute 25 percent for all projects constructed in any fiscal year.

It should be emphasized, however, that this bill, aside from providing for basin planning, is still primarily an expansion of the existing Federal program of grants for constructions of municipal sewage treatment plants. It will not solve pollution problems arising from the many sources unrelated to municipal sewage. Thus, to call it a "clean rivers" bill would be a misnomer. But it does lay the groundwork for more compre-

hensive future legislation by authorizing a study of tax and other incentives to abate industrial pollution, methods to control agricultural pollution, as well as Federal grants for research and demonstration projects.

I believe, too, that H.R. 16076 is far more realistic with regard to cost than the bill already passed by the Senate. Whereas S. 2947 would authorize \$6 billion for grants through 1972, our committee's bill proposes \$2.4 billion through 1971. This would appear to be more in line with the ability of States and communities to properly utilize these funds and also reduces the inflationary effect at a time when inflation is of widespread concern. It must be remembered further that numerous other Federal programs offer similar assistance in this field.

Mr. FOGARTY. Mr. Chairman, H.R. 16076 represents an adept melding of several compelling arguments on the extent to which the national water pollution control effort should be accelerated. I believe it presents the most reasonable course of action that can be taken at this time.

There should be no need to describe again the critical water problems which the country faces today and which, without stepped-up action, will worsen in the very near future. A portrait of the pollution-caused waste of our water resources was presented to the Congress just last year and was the reason for passage of the Water Quality Act of 1965. The situation is virtually no better today. This year, the sixth consecutive year of drought in this section of the country, brought water use restrictions to this very building.

In light of the seriousness of the problem, one of the few critical questions which can be raised concerning H.R. 16076 is whether this legislation goes far enough. The \$2.450 million which the bill authorizes for sewage treatment plant construction over the next 5 years is admittedly not the final solution to the water pollution problem. It does,

however, authorize for fiscal year 1971 an amount more than six times greater than the authorization for the current fiscal year. And there is a legitimate question whether the States will be able to utilize even the full amounts which are authorized under H.R. 16076. The bill provides attractive incentives to encourage the States to take advantage of these funds. The problem is can the States gear up their pollution control efforts to even the comparative moderate pace which is set by this bill.

The cost estimate study which the bill authorizes will hopefully end the confusion over present estimates of the size of our pollution problem. When better data from that study is presented, we can extend or adjust the authorizations accordingly. In the meantime, we should certainly be more than willing to provide the amounts called for in H.R. 16076, amounts which we know are necessary and which we know stand the best chance of being put to good use.

I would like to mention that three different municipalities in my district of Rhode Island have passed formal resolutions urging support of this bill, and one newspaper, the Observer wrote a front-page story making the flat statement that the clean rivers pilot program "could save the Woonasquatucket River" from extinction.

As the scope of pollution control broadens, the need for coordination and planning increases also. The clean rivers restoration program of H.R. 16076—the river basin pollution control provisions—permits this coordinated approach. By providing up to 50 percent of the cost of municipal sewage treatment construction in these basins, this bill makes possible the elimination of municipal pollution from entire rivers. Basinwide plans, developed jointly by the States, will be subject to review by the Department of the Interior, the Water Resources Council, and the Department of Housing and Urban Development, with the Congress having the authority for final approval.

The health aspects of this planning would seem to come under the purview of the Department of Health, Education, and Welfare, although that Department is not mentioned in section 203 of the bill. However, in view of the "Interdepartmental Agreement Concerning Consultation Between Departments of Health, Education, and Welfare, and the Interior," dated September 2, 1966, this additional coordination is covered.

The \$228 million in research expenditures which H.R. 16076 authorizes through fiscal 1969 is worthy of mention also. This includes more than \$56 million for badly needed industrial pollution research. It also includes \$3 million for studies of estuaries. Our estuaries, as every coastal State knows, are in dire need of pollution abatement if they are to continue as sources of our shellfish and as recreational areas. The authorized comprehensive estuarine study, which will be completed in 3 years, will include recommendations for a comprehensive national program for their preservation, study, use, and development.

H.R. 16076, then, presents a well-planned program of continued and reasonably accelerated water pollution control. It will permit us to move ahead with a national clean-up campaign while providing the facts that will enable us to evaluate and improve these efforts in the future.

Mr. BATES. Mr. Chairman, water pollution control is one of the most important, but costly, domestic problems in our Nation today. In recent years, the Congress has taken definite steps toward solving that problem, but we still have a long way to go.

Before us today is legislation which offers another major advance toward the goal. The principal handicap confronting the cities and towns charged with contributing to cleaning up our rivers is the enormous expense of constructing the necessary sewage treatment plants. The total cost for restoring cleanliness to the rivers of the United States has



been estimated as high as \$100 billion.

No one should be misled into believing, therefore, that the title of the "Clean Rivers Restoration Program" in this pending bill means the problem is being suddenly eliminated. The title spells out the objective rather than assuring its attainment in one big flourish. In that regard I believe we are here on the right track.

As to the amount of money authorized by this bill, although it is less than that sought by the Senate-passed bill, S. 2947, the figures herein appear more realistic under existing conditions. It is conceivable, of course, that as more and more States follow the lead of my home State of Massachusetts in taking advantage of the incentive provisions of this and previous legislation, the authorizations for some of the future years may justifiably be revised upward.

Let me for a moment refer back to the situation in Massachusetts. Through the initiative of Governor Volpe and a select legislative committee headed by Senator Ward of Fitchburg, a comprehensive bipartisan study was made into the pollution control needs in the Commonwealth—inspired by the provisions of the Water Quality Act of 1965 and the prospect offered by the proposed clean rivers program. As a result, the Massachusetts Legislature this year voted to bond \$150 million for use in providing the State's share and easing the burden of the individual communities—and thereby entitle Massachusetts to a larger allocation of Federal funds.

I do not believe that any State has thus far done more to meet the great cost factor for construction of sewage treatment plants, which the bill before

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us so materially helps. In fact, the Federal construction grant authorization for pollution control purposes in the current 1967 fiscal year is only \$150 million for the entire country—giving some idea of the Bay State's determination, aided by a bond for that amount, to lick its own river pollution problem.

Massachusetts and other New England States are out in front in another respect related to cleaning up our area's rivers. The Governors of the six New England States were the first to request formation of a river basins commission. One year ago this coming October 15, the Federal Water Resources Council approved creation of the New England River Basins Commission as the first such organization so sanctioned. I was pleased to be advised recently that the signing of the Presidential order to formalize this commission is imminent.

The clean rivers restoration program we are now considering, it is good to note, provides for incentive grants for up to 50 percent Federal participation for river basin plans to achieve proper water quality control. In this regard the New England River Basins Commission should be in the forefront in developing such a plan, particularly insofar as the Merrimack River Basin is concerned. The Massachusetts portion of this basin is primarily in my congressional district, so I naturally am hopeful that this phase of the program before us will lead to early launching of a basin project for the Merrimack River.

Although this bill does not go as far as I would like to see in respect to incentives for industrial construction of sewage treatment plants, it does provide for a study by the Secretary of the Interior looking toward appropriate future legislation. We will not have truly "clean rivers" until treatment of industrial sewage not tied in to municipal sewer systems is also assured. Toward that end I have submitted a bill to give industries income tax credit for the expenses of installing their own treatment plants. I hope some such legislation will be enacted to help provide the missing segment of the clean rivers restoration program.

Mr. Chairman, I believe that the committee has here produced a basically sound bill, and I urge its approval and early resolving of its differences and those of the Senate-passed measure so

that we can get on with this vital program.

Mr. BOLAND. Mr. Chairman, I rise in favor of H.R. 16076 to amend the Federal Water Pollution Control Act.

This legislation will provide for the development of basin pollution control and abatement plans through the establishment of additional incentives; and by increasing grants under the existing program for waste treatment.

The bill will accomplish this by providing \$2.45 billion for sewage treatment plants through June 30, 1971; double the present dollar limitations on grants for smaller projects from \$1.2 to \$2.4 million, and for projects serving two or more communities from \$4.8 to \$9.6 million; add an additional 10 percent to the present 30 percent Federal grant, making a total of 40 percent if the States contribute 30 percent.

This legislation also will establish a new concept of incentive grants amounting to 10 percent for the development of basin plans for water pollution control; will increase the total Federal grant by another 10 percent, or up to 50 percent under the basin plan, if the States match to the extent of 25 percent of the total costs; will provide \$228 million for research through June 30, 1969; will authorize financial help to the States in preparing basin plans; will provide reimbursement for projects starting after June 30, 1966; and will authorize studies of cost estimates, additional State personnel, financial assistance to industry, research on industrial wastes, and estuaries.

Mr. Chairman, at this time I want to compliment Senator EDMUND MUSKIE, of Maine, and Senator EDWARD M. KENNEDY, of Massachusetts, for their leadership in the Senate in pushing this legislation through Congress; and the League of Women Voters, for their long and active interest in this very important legislation. I would also like to commend State Senator Joseph D. Ward, of Fitchburg, Mass., for his leadership in the Massachusetts Legislature, which

recently enacted a clean water act designed to give financial assistance to Massachusetts communities as a supplement to Federal assistance under the Federal Water Pollution Control Act in an effort to combat pollution on Massachusetts streams; and to State Representative Roger L. Bernashe, of Chicopee, who is chairman of the Massachusetts Legislative Committee on Water Supply and Water Resources, for his efforts in battling against the further pollution of Massachusetts rivers.

On September 6 last I joined Senator KENNEDY, Congressman SILVIO CONTE, and Secretary of Interior Stewart Udall in an inspection of the Connecticut River. The Secretary had been invited by Senator KENNEDY to tour the major rivers in Massachusetts and to see first hand the need for further Federal financial assistance in the construction of sewage treatment plants so that communities can help clean up pollution on the Connecticut, the Blackstone, the Merrimack, and the Charles Rivers in our Commonwealth.

Mr. Chairman, the double threat inherent in water pollution, that to public health and that to the historic natural charm and beauty of our country, should prompt us to act quickly and wisely, before our rivers are fouled beyond feasible recall, or to a point where expenses of such reclamation will be gigantic. In view of such an encroachment of industrial waste and public sewage on the beauty of our richly endowed Connecticut River, I introduced a bill in the House a short time ago to authorize the Secretary of the Interior to study the feasibility and desirability of a Connecticut River National Recreation Area. This study included provisions for the cleansing of the water itself. H.R. 16076 is similarly designed to cope with this growing danger of stagnation and ugliness on our national waterways.

This far-reaching and imaginative bill is the latest and most comprehensive in a series of pollution control laws of ever-increasing scope. It complements

logically the original Federal Water Pollution Control Act, and such related measures as the Water Quality Act of 1965. This act also strengthens other existing laws, including the Oil Pollution Act of 1924. By removing the upper ceiling restrictions on Federal grants for sewage treatment plants by providing a 30-percent grant regardless of the total cost of the project, this bill entices increased activity, by State and local governments, in pollution elimination programs. Also, further encouragement is supplied by a bonus of 10 percent of the total project cost to be awarded to communities developing comprehensive metropolitan plans.

This supplement would bolster tremendously the efforts of the 26 pollution-plagued Massachusetts communities along the Connecticut River that are now striving to hold back the ominous buildup of filth and refuse in their river. Such grants would be of significant aid in defraying the estimated \$20 million it will cost these cities and towns to construct adequate facilities. Without this aid, many of these communities would lack the resources to undertake such projects themselves.

In addition to all these highly beneficial services which this act authorizes, it also stipulates that scientific research and experimentation take place. It is evident that if we are to ever finally win the war against water pollution, we must better understand its various forms and the precise ways in which it affects our rivers. Specifically, this legislation calls for detailed study of the pollution problem in estuaries and estuarine zones of the United States, and a study by the Secretary of the Interior of the final big picture impact and costs of pollution control and abatement. In respect to efficient implementation of all these endeavors, this bill would cause a study concerning the need for additional trained State and local personnel to carry out the program pursuant to this act.

Mr. Chairman, for all these important

and pertinent reasons, I urge the adoption of this forward-looking piece of legislation in order that clean, healthful, and beautiful waterways be restored to the bounty of national resources.

Mr. CONTE. Mr. Chairman, it is a privilege for me to identify myself and my district with the work that is being done by this Congress in the field of water pollution abatement and control and to acknowledge the debt of gratitude owed the Public Works Committee for the attack that has been launched at its urging for clean water, which will be continued in this legislation.

We have only begun to fight this problem, but the efforts of the able members of this committee and their counterparts in the other body—the “Mr. Cleans” of the Congress as described by the Boston Herald—have awakened the awareness of our people across the country and made possible the first, difficult steps in the long journey toward restoration of our clean waters.

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The spotlight of public attention has been glaringly focused on continuing and ever-increasing pollution of our water resources in recent months. Studies, articles, proposals, and recommendations have been numerous, indeed. While there remains little left to be said with regard to the preciousness of our natural water resources or the critical threat to those resources from pollution—uncontrolled and unabated—I believe a recent article, titled “Our Dying Waters: The Story of a National Disgrace,” very aptly speaks the mind of most of us.

With regard to this country's water resources, our heritage of clean water, the article's author, John Bird, says:

We Americans were privileged to start our national life on a virtually unused, unspoiled continent. The country which became the United States was vast and beautiful, a landscape of mountains, valleys and plains, all drained by one of the world's most generous systems of waters crystal-clear mountain brooks, meandering lowland creeks, great rolling rivers, massive fresh-water lakes and salty bays and estuaries. Here was a primary

source of life, wealth and enjoyment beyond measure, it seemed to our forefathers—enough good water to meet a nation's needs for all time to come.

The author continues, addressing himself forcefully to the despoilation of these resources—the manmade threats to our supply of clean water:

Within a few generations we have fouled and degraded our beautiful waters. We have filled our streams with raw excrement and garbage laden with disease. We have stained them with oil, coal dust, tar, dyes and chemical "liquors" discharged by industries. We have burned them with powerful acids which destroy all aquatic life except a stringy, loathsome type of algae. We have turned them gray and murky with silt and sludge, smothering shellfish and other forms of bottom life. We have used them to dispose of residues containing long-lasting poisons, some so powerful that less than one part per billion in a stream can kill fish. And, as though to show our contempt for our natural scene, we have dumped billions of tons of trash and offal in our once lovely waters: beer cans, worn-out tires, old mattresses, rusty oil drums, refuse from hospitals, broken glass, dead animals, junked automobiles.

Can any one of us turn deaf ears to this indictment? I cannot shut my eyes to the warning signs posted the length of Rock Creek, which I pass each day on my way to and from my office, cryptically warning: "No Wading or Swimming. Polluted Water." Visitors to Mount Vernon, walking down to the boat landing on the Potomac River, a matter of a few hundred yards from the home of our first President, are greeted by a sign advising: "Do Not Come Into Contact With Polluted Water."

Massachusetts' First Congressional District is not immune.

My hometown newspaper, the Berkshire Eagle of Pittsfield, commenting editorially on two bills I introduced in February of this year in my fight against water pollution, described three rivers in my district as "horrible examples" of polluted waters.

Flowing across the easternmost area of the First District is New England's longest river, the Connecticut, singled out by the Federal Water Pollution Con-

trol Administration for a pollution conference late in 1963, and subsequent enforcement action.

An increasing number of letters come into my office to report divided interests vying for water rights to lakes and reservoirs, of dead game fish in mountain streams, and low water levels leaving boating and swimming areas inaccessible and unusable, of slack streamflows and falling water levels concentrating the pollution.

All of this has taken place in an area described in writings of the 19th century as "a landscape that combines every variety of beauty—valleys, small lakes glittering like sapphires, noble masses of granite rocks, clear mountain brooks, and sunset glories."

The time for decisive, far-reaching action in Massachusetts can be delayed no longer. I am sure the same can be said for virtually every State and every congressional district in the Nation, whether that action is called for on a broad scale or in terms of a single treatment facility.

The action of this body, in approving H.R. 16076, will be the hallmark of the future for our water resources and our ability to allay the threats to those resources through research, development, engineering, planning, construction, and management of pollution abatement and control programs and facilities.

The two pieces of legislation I introduced earlier this year, H.R. 12454 and H.R. 12455, embodied my views for an approach to cleaning up our waters.

The first of those bills provided for an amendment to the Federal Water Pollution Control Act, as amended—most significantly by the Water Quality Act of 1965—to increase the Federal and State participation in the local community projects, thereby relieving the heavy financial burden imposed by the construction of essential, but costly, sewage treatment facilities.

The 30-percent Federal grant would be increased to from 45 to 60 percent of the project cost, dependent upon match-

ing by the State of the additional Federal participation.

The second bill, while without the jurisdiction of the Public Works Committee, must have the support and encouragement of everyone concerned with meeting the challenges of water pollution, in order for it to succeed. I refer, of course, to legislation allowing tax incentives to industry when they install appropriate treatment facilities to treat their industrial wastes.

Legislation of this tenor is not new in this Congress. What is new is that, perhaps for the first time, the impetus can be felt for action on a legislative measure of this sort. I pledge my complete cooperation and support for this phase of the fight against pollution.

Clean water can no longer be considered to be a free commodity. It is not. It is essential to recognize this if we are to develop abatement programs equal to the task that must be accomplished. It cannot be said that any particular segment of society should bear the burden of the billions of dollars that will be required to clean up our water. It is not a local, State, or Federal community problem alone. It is not the problem of the private sector any more than it is strictly a government problem.

The revulsion of polluted water is universal. Water life cannot live in it; humans cannot drink or play in it; manufacturers cannot draw on it for industrial purposes.

The dividends of clean water are, likewise, universal. So, then, must be the responsibility for the costs of cleaning it—and the incentive for every sector to incur that cost.

The underlying philosophy of the legislation I have written is obvious. It is one of incentive; the incentive of involvement for the States and the incentive to take action for the private industries.

Remarks of the Public Works Committee, in the report on the Water Quality Act of 1965, were directed to the involvement of the States in what had, hereto-

fore, been a local-Federal communities relationship:

The committee is hopeful that the States will assume full partnership in assisting municipalities to provide for their necessary treatment works by sharing the financial burden which these cities are often unable to shoulder even with the Federal assistance otherwise available. This is a most important and forward-looking step toward the solution of our vast water pollution problems. For if there is State participation there will be for the first time on a nationwide basis a joining together of the Federal, State, and local communities to solve this problem. The participation of all will insure a swifter cleanup of our Nation's waters and at the same time will lighten the financial burden on all governments.

Unfortunately, the States have not responded as was expected to the incentives provided in the legislation, and the communities, willing to undertake pollution abatement and control measures, have, in many instances, simply been unable to assume the heavy financial burden involved. The mere handful of States that have programs of grants to match Federal funds or to facilitate local community action is mute testimony to the need for greater incentives.

I am happy to be able to report that Massachusetts has joined the ranks of those States with such programs. It not only has joined those ranks, but has taken a special position in the vanguard of State action in this area. On September 6, the Massachusetts Clean Waters Act became the law of the Commonwealth. That law has been described as incorporating "the most advanced thinking on water pollution control measures" and applauded by Secretary of the Interior Udall as placing Massachusetts in the ranks with New York and Wisconsin in comprehensive water pollution legislation. I am proud of this action in my State and hope that many other States will act in a similar fashion very quickly. The Commonwealth is now authorized to provide enough money in grants to communities or districts to qualify for the Federal grants proposed in the legisla-

tion now before this body. We in the Bay State are ready.

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Increased incentive measures on the part of the Federal Government will require our increased financial commitments to depollution. It has been reported that our towns and cities are now spending almost \$600 million a year on pollution control systems. The Water Quality Act of 1965 authorized \$150 million a year, to be spent on research, development, and construction of pollution treatment methods and facilities. But, we have a backlog of pollution problems—a backlog estimated to have a price tag of more than \$40 billion, just to catch up to the needs of this country today. Without the increased financial commitment authorized in H.R. 16076, that backlog will build and build and today's problems will not be resolved for decades. One writer has wryly commented: "We may choke on our own filth by then."

So long as we have one quarter of our towns and cities without treatment facilities of any kind—primary, secondary, or tertiary—for their raw sewage; so long as more than half of those communities with treatment plants treat sewage only at the primary level; so long as the warning signs of pollution increase daily in the form of dead water life, lost recreational opportunities and water shortages; we must not be diverted from the program we have undertaken in the legislation of the past.

The language of H.R. 16076 is directed squarely at meeting these threats. It represents an ambitious program and an exciting prospect which will enable this country to do more than merely hold back pollution. Its farsighted provisions—grants for research and development, grants and loans for treatment facilities construction, enforcement powers for water quality standards, to name just a few—are equal to the challenge with which we are faced.

We stand at the crossroads of decision.

The road we take from here may be determined solely on a dollars and cents basis. It is, indeed, a question of billions of dollars. As such, we must be practical enough to see the problem in this context and commit the financial resources to meet the needs.

Each day that we hesitate and delay, each day that we continue to divert our efforts merely around the fringe of the problem, is a matter of dollars and cents, too; billions of dollars of lost economic opportunities and irreplaceable water resources destroyed.

It is predicted that by 1980, the world's demands for water will be exactly equal to the supply available. We are custodians of that supply today. It is not a fluctuating supply, but virtually constant. We may be better able to utilize portions of the water resources at our disposal today, in the future. We may have dirtied even greater portions of those resources.

By 1980, the water needs can only be met if today's water supply is clean—cleaned by our efforts in the coming years. If we had concentrated our efforts a decade ago, the fight would still be an uphill one.

Author Bird has summarized the problem very succinctly.

The key question still is. "Can we save our waters?" and as of now the answer, at best, is only "Maybe."

Mr. REUSS. Mr. Chairman, I rise in support of this timely legislation which is another forward step in the fight for clean water.

There are four provisions of this bill to which I would direct my remarks:

First. The new clean rivers restoration program, which gives incentive to States to prepare and develop pollution control and abatement programs for entire river basins;

Second. The expanded research and development program;

Third. The enlarged authorization for Federal grants to municipalities for waste treatment plant construction; and

Fourth. The important, but little-

known provision calling for a study of the manpower requirements of State and local pollution control programs.

#### THE NEW CLEAN RIVERS RESTORATION PROGRAM

Title I of this bill will, for the first time, give Federal incentives to States to attack water pollution problems on a river basin scale. The river basin approach to water pollution control and abatement has proved itself in the past 50 years in Germany's heavily industrialized Ruhr Valley. Here, in a 4,300-square-mile area, one-half as large as the Potomac River Basin, in which 8 million people and about 40 percent of West Germany's industrial capacity are squeezed, a group of organizations, the Genossenschaften, have designed, built, and operated an integrated, regional system of waste disposal and water supply facilities.

The results have been spectacular—the limited water supply of the Ruhr district adequately supports the growth of its cities and industries and provides increasing recreational use of its waters for boating and swimming.

More recently, in 1961, the Delaware River Basin Commission was established to plan and utilize the water resources of the Delaware River Basin. In 1962, the Federal Water Pollution Control Administration launched its Delaware estuary comprehensive study. The objective of the study is to develop a water pollution control program for the Delaware River's tidal stretch below Trenton, N.J. A report setting forth alternative water quality objectives and the costs of attaining them was presented to the Delaware River Basin Commission in July. The commission is now studying the report.

This comprehensive water pollution control program may serve as a model for similar efforts which will be stimulated by title I of the bill we are today considering.

I am happy to report that the State of Wisconsin stands ready to take part in

this new river basin program. Chapter 614, Wisconsin laws of 1965, provides that no more than 12 regions be established in the State on the basis of factors such as river basins, watersheds, population, and economic factors. Each region will have an eight-man advisory board to advise on water problems of the region. And not later than July 1, 1968, the Wisconsin Department of Resource Development must have formulated a plan and a program "for the prevention and abatement of water pollution and for the maintenance and improvement of water quality" for each region. The Governor can then submit this plan and program to the Secretary of the Interior for approval pursuant to section 202 of this bill.

Thanks to the efforts of the Federal Water Pollution Control Administration, the State, and local governments, we already have in the Milwaukee River Basin an interim action program for combating pollution. I have urged Wisconsin Gov. Warren Knowles to appoint the regional board for the Milwaukee region immediately so that we may have the board's help in carrying out the program.

With this headstart, I would hope that the Milwaukee River Basin would be one of the first in the country to have their river basin antipollution plan approved by the Secretary of the Interior and by Congress so that the municipalities in the area, so much in need of Federal aid for waste treatment plant construction, would qualify for 50-percent Federal grants as provided for in this excellent bill.

#### THE EXPANDED RESEARCH AND DEVELOPMENT PROGRAM

H.R. 16076 contains an excellent provision, section 203, for stepped-up research, development, and demonstration of new methods of treatment of both municipal and industrial wastes.

Under this bill all research, development, demonstration, and training programs, including the program for

eliminating wet weather discharges from combined storm and sanitary sewers, will receive a \$75 million annual authorization for 3 years. In fiscal 1966, programs covered by this new authorization received only about \$46 million to carry out their many responsibilities.

Only last June, the Research and Technical Programs Subcommittee, of which I am chairman, in House Report No. 1664 made clear the need for a vastly greater authorization for the Federal Water Pollution Control Administration's advanced waste treatment program. This program, which has been operating on a meager \$1 million annually since 1960, has been able to turn municipal sewage into water fit for drinking at a cost which promises to be reasonable. At Lebanon, Ohio a small 75,000-gallon-per-day test plant is performing this feat for 40 to 50 cents per 1,000 gallons. This year at \$1 million, 5-million-gallon-per-day field evaluation plant—capable of processing the sewage of a city of 35,000 people—is planned for construction.

A recent feasibility analysis of the Federal Water Pollution Control Administration indicates that a 100-million-gallon-per-day plant, costing \$33 million to serve the New York City area could produce potable water at an entirely reasonable cost of 16 cents per 1,000 gallons. Once the feasibility of these new methods is demonstrated, the new waste

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treatment plants which will be constructed as a result of the enlarged Federal construction grant program can incorporate these breakthroughs in waste treatment technology. I would hope that the \$75 million annual authorization provided for in this bill would greatly hasten the day of this demonstration.

#### THE ENLARGED FEDERAL WASTE TREATMENT FACILITY CONSTRUCTION GRANTS PROGRAM

Section 205 of H.R. 16076 provides for \$2.4 million over a 5-year period, fiscal

1967 through fiscal 1971 inclusive, for Federal grants to municipalities for construction of waste treatment facilities. This is an average annual authorization of just under \$500 million. By comparison, S. 2947, the Muskie bill which has passed the Senate, would authorize \$6 billion of expenditures over a 6-year period—an average of \$1 billion annually.

Six billion dollars is 30 percent, the present Federal share, of the \$20 billion of construction which the Environmental Pollution Panel of the President's Science Advisory Committee has estimated would be required to provide secondary treatment of wastes for 80 percent of the U.S. population by 1975.

An expenditure of this magnitude is necessary if the Federal Government is to do its share in cleaning up the Nation's rivers and streams. And is it really such an enormous expenditure? It pales, for example, beside the \$5 billion annually we are spending on our civilian space program. The Muskie bill authorizes spending over 72 months to restore the Nation's waters the same amount which we spend in only 14 months to explore outer space.

Judged from another perspective the authorization would be an average of \$5 a year or 42 cents a month per citizen as the Federal contribution to treat our municipal sewage wastes—slightly in excess of the cost of a pack of cigarettes, a bottle of beer, or a gallon of gas.

I have recently taken part in a hearing of the House Natural Resources and Power Subcommittee on Water Pollution in the Milwaukee area. At the hearing we explored in detail the sources of pollution in the Milwaukee River Basin area. The problems of this one river basin typify the water pollution problems of other river basins throughout the country.

Here are the pertinent facts: 13 of 14 waste treatment plants discharging wastes into the Milwaukee River are today inadequate, even though all now offer secondary treatment. The one plant which passes muster will open at



West Bend, Wis., next spring. It was financed in part by a 30-percent Federal grant.

Of the 13 inadequate plants, 8 were less than 90-percent efficient in removal of biochemical oxygen demand—BOD—and 11 do not disinfect their effluent.

No one knows the cost of bringing these plants up to acceptable standards. If this legislation is passed with an authorization which will do the job, it is hoped that within 6 months these municipalities will make application for Federal assistance to make the necessary improvements.

Without this \$6 billion authorization, there is little incentive for these municipalities to plan new construction. Federal antipollution money is so scarce in Wisconsin, as elsewhere, that a municipality has to wait in line for years to receive any.

Metropolitan Milwaukee has long been a leader in municipal sewage treatment. In the 1920's it pioneered the activated sludge secondary treatment process. It alone of all U.S. cities dries excess sludge and sells it directly as organic fertilizer—Milorganite.

As you might imagine from its past record, the Milwaukee Metropolitan Sewerage Commission is abreast of the times. Its 200-million-gallon-per-day Jones Island plant provides 95-percent effective BOD<sub>5</sub> removal and removes 80 percent of the phosphorous in the sewage it processes. It has achieved this high efficiency largely without Federal aid because the Federal program has been so small and has had stringent dollar limitations on the maximum amounts of Federal grants for any one waste treatment project. Since the Federal waste treatment construction grant program began in 1956, the Metropolitan Sewerage Commission has spent \$72.5 million for construction eligible for Federal grants and received only \$1.5 million in Federal aid.

It now has programmed \$37,750,000 of improvements through December 31, 1975, which under this bill would be

eligible for at least \$15,100,000 or 40 percent Federal waste treatment plant construction aid. These improvements include the addition of \$15 million of secondary treatment facilities at the commission's new 130 million-gallon-per-day South Shore treatment plant which will begin primary treatment operation next July.

If the Metropolitan Sewerage Commission is to receive the money to which it will be entitled under this bill, and, in addition, the needs of communities in the Milwaukee River Basin and all of Wisconsin are to be satisfied, it will be necessary to authorize \$6 billion over the next 6 years as called for in the Muskie bill. Wisconsin's share of this authorization would average \$20 million per year.

At the recent Milwaukee water pollution hearings of the Natural Resources and Power Subcommittee, Mr. Theodore F. Wisniewski, who is in charge of Wisconsin's waste treatment facilities grant program, testified that this year's authorization of \$150 million will enable only five new projects to be begun in all of Wisconsin. These projects will receive approximately \$2 million in Federal grants.

Today 60 Wisconsin communities have made application for over \$7 million in Federal grants-in-aid. All would be ready to break ground by next spring at the latest were Federal funds available. This bill, with its \$150 million authorization for fiscal year 1967, means that 55 Wisconsin communities will be forced to build without Federal funds or to delay construction for at least a year.

And these figures do not reflect the even more numerous communities which need new waste treatment plants but have not made application. For example, not one of the 13 municipalities discharging inadequately treated wastes into the Milwaukee River has submitted an application for Federal aid and is included in this list.

The Wisconsin backlog is enormous.

The shortage of Federal money has an

even more critical effect on the pace of waste treatment plant construction in Wisconsin now that the State has passed its excellent new Water Pollution Control Act. Secretary Udall recently called this act the finest piece of legislation yet enacted in the national fight to preserve clean water.

The act provides for State assistance to localities of one-third of their total costs—site, construction, and financing—of building waste treatment facilities. It will pay a full one-third share of \$300 million of the total costs of building treatment plants. But it is doubtful whether Wisconsin localities will take advantage of this State aid if Federal 30-percent aid is not also forthcoming. Thus, the Federal program threatens to stall the excellent new State program.

Moreover, if this State program qualifies under H.R. 16076, it will mean that the bill's authorization will be even more inadequate. Dollar limitations will be removed on individual projects and the Federal share will be stepped up from 30 to 40 percent throughout the State and to 50 percent in approved river basin areas.

Wisconsin stands ready to pay its one-third share of \$300 million of the total costs of building waste treatment plants. H.R. 16076 would pay the Federal 30-percent share of only \$163 million of construction, and 40 percent of only \$122.5 million of construction.

The Muskie bill, on the other hand, would pay 30 percent of \$400 million of construction and 40 percent of \$300 million of construction.

Mr. Chairman, the Wisconsin case should emphasize the tremendous need for construction of waste treatment facilities and the present backlog of applications. It should, moreover, indicate the need for the \$6 million Muskie bill authorization.

#### THE STUDY OF THE MANPOWER REQUIREMENTS OF STATE AND LOCAL POLLUTION CONTROL PROGRAMS

Section 203 of this bill would direct

the Secretary of the Interior to make a study of the additional manpower needs of State and local governments in order to carry out the provisions of the bill and other recent water pollution legislation. The Secretary is also to report on how existing Federal water pollution programs can be used to train water pollution control technicians for employment by State and local governments. The findings of the study are to be reported to the President and to Congress by July 1, 1967.

This study is sorely needed. Water pollution legislation already passed by

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this Congress has greatly strained available manpower resources.

Last session we authorized over \$200 million of additional Federal funds for construction of waste treatment facilities and for research and development. The bill we are today considering would raise Federal waste treatment facility construction grants in 5 years over sixfold to \$950 million—the Muskie bill would authorize a tenfold increase to \$1.5 billion in 5 years time—and would increase the research and development authorization by approximately \$30 million this fiscal year.

The net result is that the State and local governments which will do the construction and operate the new waste treatment plants may find themselves with the needed money but without the necessary engineers to do the job. Mr. Russell Lynch, an astute student of water pollution problems and a member of the new Wisconsin Water Resources Board, testified at the Milwaukee water pollution hearings that the shortage of trained manpower available to State and local governments is acute.

I should hope that the Secretary's study will produce imaginative suggestions for programs which the 90th Congress can enact to close the manpower gap which we have created.

Mr. Chairman, the Public Works Committee has again done a great service for

this House by creating and reporting this fine bill. Together with the Water Quality Act of 1965, which was also a fruit of the committee's labor, H.R. 16076 will stand as landmark legislation in the continuing fight for clean water. I urge the House to enact it.

Mr. RYAN. Mr. Chairman, H.R. 16076, a bill to amend the Federal Water Pollution Control Act, is directed toward solving the overwhelming problem of pollution in our society. I am disappointed, however, because I feel that this legislation does not reach the magnitude of the problem. The district that it is my privilege to represent borders on one of the great rivers of this Nation—a river with a splendid history of service to this country, but a river that is now foully polluted. This legislation provides for Federal programs in sewage treatment, basin plans, and incentive grants in research and development. It would help to alleviate the unhealthy condition which plagues the Hudson as well as countless other great rivers of this Nation. The Federal Water Pollution Control Act would now provide for the development of basin pollution control and abatement through the establishment of additional incentives, and would provide greater grants for waste treatment. These are certainly steps in the right direction.

As a member of the Committee on Science and Astronautics, which conducted hearings on the adequacy of technology for pollution abatement, and, as a representative and inhabitant of an area that is profoundly affected by this problem, I have been interested in the techniques and methods for pollution control and abatement for quite some time.

Many witnesses appeared before the Science and Astronautics Committee subcommittee to present their views and suggestions on the water pollution problem. Without exception, they recommended more extensive Federal efforts in the funding and initiating of abatement and control projects. Clearly, ex-

tensive Federal participation in this field is more than a necessity.

I am disappointed with this bill. While I feel that H.R. 16076 is a significant and valuable contribution, I do not feel that it is sufficiently extensive. Its attack on this critical problem is mitigated by self-imposed restrictions. It is, one might say, a watered-down version of the bill passed unanimously by the Senate.

The bill provides a total of \$2.3 billion in new authorizations for a 4-year period, or an average of \$575 million annually. The Senate-passed measure, on the other hand, would provide a total of \$6 billion for a 6-year period, or, \$1 billion annually. Thus, the Senate-approved program furnishes more than twice as much financial support, and it authorizes the program for 2 years longer. The problem of our polluted rivers—and, as the committee noted, hardly any American river is free of putrefaction of some type—was underscored last year when the drought on the northeastern seaboard necessitated severe restrictions on public use of water. Due to this crisis, people were, among other things, forbidden from watering their lawn and taking showers. The situation became so critical that an airplane was flown over New York City with the sign, "Don't Flush for Everything," attached to its rear. Yet in New York, for example, had the waters of the Hudson been fit for consumption, this restrictive rationing would not have been necessary.

Mr. Chairman, I believe that the American public supports a concentrated attack upon the pollution problem. Clean water is the concern of Americans of all incomes, geographical locations, and types of employment.

Mr. Chairman, H.R. 16076 would be considerably improved if the authorizations were as great as the Senate-approved figures.

Mr. JOHNSON of California. Mr. Chairman, I rise in support of H.R. 16076, a bill to amend the Federal Water Pollution Control Act in order to improve and

make more effective certain programs pursuant to such act. In so doing I first would like to commend the Honorable GEORGE FALLON, the chairman of the Public Works Committee, the Honorable JOHN BLATNIK, the chairman of the Rivers and Harbors Subcommittee which drafted this legislation after very comprehensive hearings and consideration, and also the Honorable WILLIAM CRAMER, the ranking minority member of the Public Works Committee, for their leadership in bringing to the floor of the House of Representatives a very comprehensive bill which I believe will go a long, long way toward solving the very complex and damaging problems of water pollution.

Many areas of the Nation have suffered very serious droughts. This has brought clearly to our attention the importance of our water resources to the basic foundation of our economy. It is not well enough that we develop these resources through multiple-purpose projects and other ways if pollution of our rivers, our streams, and our lakes steals from us the value of this water. We have only to look out the window down at the Potomac River to realize the price we must pay for pollution.

Hopefully through the efforts of this bill we will be able to invest in pollution control and prevention, and investment which I feel would return great dividends. This is especially true of the preventive steps which should be taken before the situation becomes as desperate as it now has become in many of your water sites. I should point out that just a short time ago the President, in discussing the question of pollution, pointed out an example of waste resulting from pollution:

This is water that could be used and re-used, if treated properly. Today it is ravaged water—a menace to the health. It flows uselessly past water-hungry communities to an indifferent sea.

Mr. Speaker, turning to my own State I feel that we have had a good program of water pollution control. However,

testimony before the Public Works Committee clearly shows that we must have further assistance if we are to solve completely the problems, which in many instances are bistate in nature. A good example of this is Lake Tahoe on the California-Nevada line. I am very appreciative that the Rivers and Harbors Subcommittee, under the leadership of the gentleman from Minnesota [Mr. BLATNIK] held hearings at the lake and considered firsthand problems which we are facing there. At these hearings a number of preventive and corrective measures were proposed. These are in the nature of minimum requirements.

While the lake's crystal-clear waters now exceed drinking water standards, the threat of degradation is being posed by rising population, millions of visitors, and sewage seepage into the lake from the cesspools and septic tanks that still provide the principal mode of waste treatment. Through the development of a basin plan which is authorized by this legislation and through the other programs provided for in this legislation, we should be able to overcome the pollution problem, which, if unconquered, will destroy one of the Nation's most scenic spots.

Certainly there are other areas throughout the country which are experiencing similar problems. All are worthy of consideration and assistance at the Federal level. Therefore let us today give our support to the Federal Water Pollution Control Act and thereby show the Federal Government will continue to accept its responsibility in the field of pollution control by providing for the development of basin pollution control and abatement plans

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through the establishment of additional incentives; by increasing grants under the existing program from waste treatment; and by making certain other provisions.

Mr. ZABLOCKI. Mr. Chairman, the House can take a significant step today

in the direction of ridding our Nation's lakes and rivers of the scourge of pollution by approving H.R. 16076.

In the face of ever-increasing demands for water, action by the Federal Government in this area has long been imperative. The fact that we can now fulfill our immediate responsibility in passing meaningful and productive legislation is gratifying.

By approving the Federal Water Pollution Control Act the Members of this body can demonstrate their determination to work cooperatively with the 50 States of our Nation in a coordinated program.

In my own State of Wisconsin, for example, bordered as it is by two of the Great Lakes and blessed with thousands of smaller fresh water lakes and streams, the pressing need for this legislation has been obvious for too long. Wisconsin has, in a very real sense, become virtually surrounded by filthy and contaminated water. Along our western border the once magnificent Mississippi River is now little more than a tragic torrent of filth. Lakes Michigan and Superior along our eastern and northern boundaries have lost much of their natural beauty and recreational value and are now cesspools of inadequately treated municipal sewage, industrial wastes, and shipboard discharges.

Across the vast reaches of our great north country, lakes once abundant in game fish and otherwise providing natural habitat for other wildlife are now stifled by excessive weeds, murky and dank water, and undesirable odors.

The unfortunate reality is that my State of Wisconsin is not alone in this regard. From across the land the evidence has mounted in a rising crescendo—in an urgent plea for meaningful corrective legislation.

It goes without saying that while H.R. 16076 will go far toward providing that corrective action, much will still remain to be done. Because water pollution is the result of many complex factors and cuts across community boundaries indis-

criminately, continued coordinated effort by all levels of government will be necessary.

Upon the hopeful passage of this bill I feel confident that succeeding Congresses will look to the responsible efforts of this 89th Congress as the precedent which will guide their future actions in the cause of returning our lakes and rivers to the people.

Mr. MATHIAS. Mr. Chairman, I am pleased to support H.R. 16076, the Federal Water Pollution Control Amendments and Clean Rivers Restoration Act of 1966.

Water pollution is an urgent, ominous, and persistent threat to our natural resources, to our economic growth, and to our national well-being. The unusual unanimity of House support for this bill shows that the Congress recognizes the gravity of this threat, and also recognizes that the House Public Works Committee has presented to us a reasonable and promising measure.

In addition to the expanded Federal support for pollution control projects provided in H.R. 16076, the bill has several especially commendable aspects. First, title I embodies two steps which I have advocated for some time, and which were incorporated in a bill (H.R. 12457) which I introduced on February 2. These steps are: First, to raise to a more realistic level the dollar ceiling on Federal participation in individual projects, and second, to provide additional incentives for meaningful State participation, thus reducing the heavy burdens on individual communities. While H.R. 16076 does not go as far in these directions as my bill, it does make significant progress and should encourage an expanded attack on pollution problems.

The new clean rivers program in title II is based on the obvious premise that pollution problems which infect an entire river basin must be dealt with basinwide. By setting forth a workable process for formulation and approval of basinwide plans, and by providing special incentives for such comprehensive

efforts, the bill should greatly aid troubled regions like the Potomac River Basin, where the complex and stubborn problems of pollution cannot be resolved by the best efforts of individual cities, counties, and towns. I trust that the Governors of the Potomac Basin States will promptly begin to develop concrete plans for implementing the act in this vital, beautiful, and historic region.

Finally, I am very pleased that H.R. 16076 encourages industrial antipollution initiatives not only through a strengthened program of cooperative research, but also through investigation of new tools, such as tax incentives. The use of tax incentives, an approach which is gaining growing support in Congress and throughout the Nation, was recommended in my bill, H.R. 12481, and has been advocated by many of my colleagues. The Secretary of the Interior is directed under section 211 of the pending bill to study the tax incentives route and other means of furthering industrial leadership in combating pollution. I look forward to receiving his recommendations, and meanwhile will continue to press for complementary consideration of tax law reforms by the House Ways and Means Committee.

Mr. BLATNIK. Mr. Chairman, I have no further requests on this side for time.

Mr. CRAMER. Mr. Chairman, I have no further requests for time.

The CHAIRMAN. There being no further requests for time, pursuant to the rule, the Clerk will read the committee amendment in the nature of a substitute now printed in the bill as an original bill for the purpose of amendment.

The Clerk read as follows:

\* \* \* \* \*

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AMENDMENT OFFERED BY MR. REID OF  
NEW YORK

Mr. REID of New York. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. REID of New York: On page 33, line 22, after "coastal waters", insert "sounds".

Mr. REID of New York. Mr. Chairman, the amendment I am offering will make explicit that "sounds," such as Long Island Sound, are covered by the definition of "basin" in the instant bill.

If the State of New York or other appropriate States want to take advantage of the basin approach in a program to control and abate pollution, Long Island Sound would be clearly covered and eligible for 50 percent Federal funding provided the State or States contribute 25 percent of the cost.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. REID of New York. I am happy to yield to the gentleman from Florida.

Mr. CRAMER. I am glad to accept the amendment.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. REID of New York. I am happy to yield to the gentleman from Minnesota.

Mr. BLATNIK. Mr. Chairman, this is a clarifying amendment and a justifiable one. As chairman, on behalf of the committee, I will accept the amendment.

Mr. REID of New York. I thank the chairman.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New York.

The amendment was agreed to.

AMENDMENT OFFERED BY MR. HARSHA

Mr. HARSHA. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. HARSHA: On page 46, line 7, after the period add the following new language: "The Secretary shall report the results of such investigation and study, together with his recommendation, to the Congress not later than January 30, 1968."

Mr. HARSHA. Mr. Chairman, this amendment deals with a very important aspect of the whole problem of water pollution control and pollution abatement. This section authorizes the Secretary of the Interior to conduct a full

and a complete investigation and study of the methods for providing incentives designed to assist in the construction of facilities and works by industry designed to reduce or abate water pollution, but the section as it now reads, without the amendment, does not provide any time limit for this particular study to be completed. Because of the urgency of these problems and the national interest in it, I believe it would be much more advisable to have a particular time limit within which the Secretary of Interior should report to the Congress about this particular study he would be authorized by the legislation to make. That is the purpose of my amendment, and I hope it is adopted.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. HARSHA. I yield to the gentleman from Florida.

Mr. CRAMER. I think the gentleman's amendment is sound; otherwise there would be no time limit, no specific requirement for reporting. This is an important section. There should be a time limit stated. I think the time provided is reasonable, and I support the amendment.

Mr. HARSHA. I thank the gentleman.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. HARSHA. I am happy to yield to the gentleman from Minnesota.

Mr. BLATNIK. I heartily concur with the statements and sentiments expressed by both the gentlemen, and the amendment is accepted by the chairman.

Mr. HARSHA. I thank the gentleman. Unless the amendment is approved the study could go on indefinitely and the purpose of the entire provision would be rendered ineffectual.

The CHAIRMAN. The question is on agreeing to the amendment of the gentleman from Ohio.

The amendment was agreed to.

AMENDMENT OFFERED BY MR. IRWIN

Mr. IRWIN. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. IRWIN: On page 46 after line 7 insert the following:

SEC 212 The Secretary of the Interior shall conduct a full and complete investigation and study of the extent of the pollution of all navigable waters of the United States from litter and sewage discharged, dumped or otherwise deposited into such waters from water craft using such waters, and methods of abating either in whole or in part such pollution. The Secretary shall submit a report of such investigation to Congress, together with his recommendations for any necessary legislation, not later than July 1, 1967 "

Mr. IRWIN. Mr. Chairman, I have discussed this amendment with the distinguished gentleman from Minnesota [Mr. BLATNIK] and the distinguished gentleman from Florida [Mr. CRAMER]. It speaks for itself. I believe there is no objection to it.

Mr. BLATNIK. Mr. Chairman, will the gentleman yield?

Mr. IRWIN. I yield to the gentleman from Minnesota.

Mr. BLATNIK. The amendment is acceptable. It serves a very necessary purpose. We accept it on this side.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. IRWIN. I yield to the gentleman from Florida.

Mr. CRAMER. The gentleman correctly stated the attitude on this side. We support the amendment. It is similar to the provision written in the Senate bill.

Mr. IRWIN. I thank the gentleman.

Mr. Chairman, I am grateful to the Members of the majority and minority sides for their help in this matter.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Connecticut.

The amendment was agreed to.

AMENDMENT OFFERED BY MR. OTTINGER

Mr. OTTINGER. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. OTTINGER: On page 28, at line 13 After the word, "Washington", add "or, in the event the Hudson

River Basin is involved, the Governors of at least New York and New Jersey."

Mr. OTTINGER. Mr. Chairman, I congratulate the committee for the fine job it has done on this essential problem.

My amendment is a technical one. The definition of a basin, under section 211, is:

*The term "basin" includes, but is not limited to, rivers and their tributaries, streams, coastal waters, estuaries, bays, lakes, and portions thereof, as well as the lands drained thereby.*

In the hearings on the Hudson River bill, H.R. 13508, now enacted into law, it was made quite clear that the Hudson River Basin would include not only the States of New York and New Jersey, which have a primary interest in the basin, but as well Massachusetts, Vermont, and Connecticut.

Since only New York and New Jersey have a substantial interest with respect to pollution in the Hudson, they should be allowed to proceed and qualify by themselves.

Mr. CRAMER. Mr. Chairman, will the gentleman yield?

Mr. OTTINGER. I am glad to yield to the gentleman from Florida.

Mr. CRAMER. The gentleman is putting the amendment on page 28, section 202? Or is he putting it with the definition of basins in section 211?

Mr. OTTINGER. The amendment is on page 28, at line 13, to make it clear that with respect to the requirement that 50 percent of the Governors of the States involved in a basin have to agree, with respect to planning and programs, this would be the provision.

Mr. CRAMER. How far has the Hudson River Basin progressed in relation to congressionally authorized action? Is there a compact? Is it in being? Has it been approved by the Congress?

Mr. OTTINGER. The compact is in negotiation.

Mr. CRAMER. Congress has not yet authorized this compact as such between these States.

Mr. OTTINGER. It has authorized

the negotiation of a compact.

Mr. CRAMER. I would suggest to the gentleman that the river basins which are included in section 28—I shall be glad to be corrected by the majority side, if they do not agree—have been approved by Congress for some sort of action or for compact approval, and have had the approval of Congress as such. They were put in there for the purpose of not requiring them to go back through that same procedure again as it relates to water pollution control, and also to give them a means of functioning with a requirement greater, not less. The gentle-

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man's amendment would provide less, rather than more than 50 percent of the Governors to make such a request relating to water pollution control. The gentleman's amendment, as I understand it, would permit less than a majority in this basin.

Mr. OTTINGER. That is correct, because in this peculiar situation only the States of New York and New Jersey have a substantial interest.

Although there are five States—New York, New Jersey, Vermont, Connecticut, and Massachusetts—involved in the Hudson River Basin, New York and New Jersey account for more than 99 percent of the area of the basin.

It is the States of New York and New Jersey that have the real responsibility for working out the compact that will determine the future course of this great basin's development.

Earlier this month, this Congress passed and sent to the President a Hudson River Compact bill, which I authored, H.R. 13508. This bill has now been signed and enacted into law (Public Law 89-605). While it deals with much more than the problem of pollution abatement, one intent of the law is to provide the mechanism through which the benefits of this very act we are considering here today will be applied to the Hudson River Basin. This was the clear and expressed intent of the Secretary of In-



terior in his endorsement of my bill.

For the RECORD I would like to present the report of the Secretary of the Interior on H.R. 13508:

U. S. DEPARTMENT OF THE INTERIOR  
OFFICE OF THE SECRETARY,  
Washington, D. C.

HON. WAYNE N. ASPINALL,  
Chairman, Committee on Interior and Insular Affairs, House of Representatives,  
Washington, D. C.

DEAR MR. ASPINALL: This responds to your request for the views of this Department on H.R. 13508, a bill "To direct the Secretary of Interior to cooperate with the States of New York and New Jersey on a program to develop, preserve, and restore the resources of the Hudson River and its shores and to authorize certain necessary steps to be taken to protect those resources from adverse Federal actions until the States and Congress shall have had an opportunity to act on that program."

We strongly recommend enactment of this legislation if amended as proposed herein.

The bill points out that the States of New York and New Jersey are currently working on a joint program to develop, preserve, and restore the resources of the Hudson River and its shores, and authorizes the Secretary of the Interior to cooperate with the Governors of those States in preparing and proposing a program of legislative action not later than March 1, 1967. It authorizes the Secretary to represent the United States in negotiations with those States, and to report to the President and the Congress on the result of those negotiations, and lists a number of factors to guide the Secretary in making the recommendations.

Recognizing that these negotiations may be protracted and that additional time will be required before the Federal and State Governments can take appropriate action, the bill provides that for a period of three years all Federal agencies with responsibility for projects affecting the Hudson River will cooperate with the Secretary in carrying out their plans. The bill further requires approval by the Secretary before construction with Federal-aid funds of highways within one mile of the river, and before construction of projects under license from the U.S. Army Corps of Engineers or the Atomic Energy Commission. The bill further imposes a three-year moratorium on Federal Power Commission licensing for projects on and affecting the river. The three-year period of delay may be sooner terminated upon the passage of appropriate legislation or upon a finding by the President that the national interest will otherwise be adversely affected.

The Hudson River today represents a major problem to the citizens of New York and New

Jersey and illustrates in virulent form a problem facing practically every major river in this country. It played a significant and varied part in the growth and development of young America and represented a major highway of commerce in the early colonial days. It remains today a major factor in the continuing development of the eastern seaboard. The Hudson River has suffered as a result of these and other factors. Industrial development along its banks presents major problems, the waters are polluted and blight has set in.

At times in its past, the Hudson River has been called one of the most beautiful rivers in the world. But it can no longer be so termed. There is no reason to permit this state of affairs to continue but it must be recognized that it will take money, time and effort to restore and preserve this river and its shores for the benefit of the citizens of New York and New Jersey, and, indeed of the United States. The States of New York and New Jersey have already expressed interest in taking steps necessary to improve the condition of the Riverway. Doing this job, however, will require action by more than those States alone. The Federal Government has a substantial interest in seeing that the job is done quickly and properly.

This Department has been aware of many of the problems presented by the Hudson River in its present state for some period of time. We have informally discussed these problems with representatives of the State governments, local bodies, and interested private persons. Most are in substantial agreement that the time has come to take steps to improve the present situation, although there still exists a wide division of opinion as to the most appropriate way in which to move.

The Hudson River Valley Commission appointed to study the problem for New York State after the introduction of Federal legislative proposals in 1965 completed its Summary Report in February of this year. It recommended the establishment of a permanent interstate commission by Federal-State compact to guide the planning and development of the Hudson River Valley. The Bureau of Outdoor Recreation of this Department has been working on a study on the same subject. Its preliminary findings have been submitted to the President's Council on Recreation and Natural Beauty, and it is anticipated that the completed Study Report will soon be published in final form. The program which this bill contemplates is consistent with the findings and recommendations of these two study efforts at their present state of development.

H.R. 13508 approaches the problem in two ways: (1) by authorizing the Secretary of the Interior to negotiate and discuss with the States proper methods of attacking the existing problems confronting the affected parties, and (2) by providing a three-year period

during which the Federal Government may act only in limited fashion.

We have given considerable thought and study to the proper form that a compact should take in order to accomplish the highly desirable purposes of this bill. It is certainly too early to know what the final version of such a compact should be, but it is not too early to see, in broad outline, that some objectives must be met, if the compact is to provide an adequate solution to an admittedly perplexing situation. Such a compact must, we feel, provide for the establishment of an overall comprehensive plan for the development and preservation of the Hudson Riverway and of the land resources of the basin that affect it. Moreover, the compact must provide meaningful standards for such a plan and must vest whatever agency is charged with the responsibility for developing and maintaining this plan with all authority necessary to assure that the plan is not impaired and is carried out in the best possible manner. We cannot accept less, for to do so would be to condemn such an agency to the role of a passive onlooker.

... We feel that its enactment would serve an extremely useful purpose, permitting the development of a compact to protect the irreplaceable resources of the Hudson River and to preserve them for future generations. All too clearly we see around us evidences of our abuse of our natural resources and national heritage. Clearly, it should not be permitted to continue and equally clearly the present bill provides a vehicle for arresting this process. It is for this reason that we endorse this bill and strongly recommend its immediate consideration and enactment.

The Bureau of the Budget has advised that it concurs in favoring the legislation, if amended as proposed herein, and that enactment of H.R. 13508, so amended, would be consistent with the Administration's objectives.

Sincerely yours,

STEWART L. UDALL,  
*Secretary of the Interior.*

It is clear that the amendment I am proposing will make it possible to carry out the intent of Congress in this measure we are now considering.

How utterly ridiculous it would be if Connecticut, Massachusetts, and Vermont between them were to launch on a river basin project for a basin in which they collectively had less than 1-percent interest. Certainly these States have an interest, but 99 percent of the interest is with New York and New Jersey.

I believe these two States should be

allowed to proceed provided they agree on a program.

Mr. CRAMER. Suppose the other three Governors disagree. It would do some harm then, would it not?

Mr. OTTINGER. They have really only a minimal interest in the river.

And practically no effect insofar as pollution is concerned. I think in this situation the States of New York and New Jersey, if they agree on a program, should—

Mr. CRAMER. Does not the gentleman feel, if this authority is desired, the States now in the process of negotiating a compact should put that term in the compact instead of getting Congress into the middle of the act and into the middle of the five Governors and let them submit it to the respective States if they want to include them if the legislatures will go along with it. But I do not think that we should try to dictate to them before they have submitted such a plan, that only two Governors can go ahead and do this with their approval.

Mr. OTTINGER. No. In this case the States of New York and New Jersey

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have more than 99 percent of the river basin and there would not really be much of an interest on the part of the States of Massachusetts, Vermont, or Connecticut. As you know, compacts take a long time to negotiate. They can be very complicated. The Delaware compact took 7 years. We hope we would not have to wait 7 years before we started on the job of cleaning up the pollution until a compact is fully negotiated. I believe that the States principally concerned—New York and New Jersey—should be allowed to proceed.

Mr. CRAMER. Mr. Chairman, I ask unanimous consent that the amendment of the gentleman from New York be reported again.

The CHAIRMAN. Is there objection to the request of the gentleman from Florida?

There was no objection.

The Clerk re-read the amendment offered by Mr. OTTINGER.

Mr. CRAMER. Mr. Chairman, I move to strike the requisite number of words.

Mr. Chairman, I do not mean to prolong the discussion, but it does seem to me that it is not proper, particularly at this late hour, to come in with a proposal of this nature that involves a basin that has not yet been submitted to the Congress for any consideration whatsoever, be it compact approval or approval of a specific flood control type of program. Therefore, all the basins that are included in this section are there for the explicit purpose of adding to the responsibilities, and the number of Governors that must be included above the 50 percent general rule was put in section 202. The amendment of the gentleman dictates that we will decrease that to two out of five. I realize what the problem is, but I think he has a solution to his problem. No. 1, in dealing with the States in their negotiations for the compact in the first place, they can then come to Congress when the compact is formed and determine whether two Governors should do it. That should be the proper place to do it and not try to prejudge something that we do not know anything about on the record, which is the form of this amendment.

I will be glad to yield to the gentleman from New York if anything I have said has been a misstatement.

Mr. OTTINGER. The problem did not come to light until the Hudson River legislation was considered and this determination was made by the Department of the Interior as I pointed out earlier. The remarks of the President when he signed the Hudson River Compact bill on September 26 reveal a considerable understanding of the problem. I would like to present these for the RECORD:

STATEMENT BY THE PRESIDENT ON SIGNING H R 13508, HUDSON RIVER BASIN COMPACT BILL, SEPTEMBER 26, 1966

Three weeks ago, in West Virginia, I said that mankind is in a race with catastrophe.

I was not speaking of war, or plague, or

famine. I was speaking of a global water shortage that even now is making itself felt.

Since the birth of Christ, man's population has increased 13 fold. Yet the amount of water available to us has remained the same.

But let me qualify that last statement. The amount of water available to us has remained the same but the amount of water we can use is diminishing at an alarming rate.

Nature isn't doing this. We are. By our carelessness, by our neglect, and by our blind rush of progress, we are fouling one of the most precious resources we possess, our rivers.

We could hardly find a better example than the Hudson River. For this river, rich in history and folklore, and once rich in natural beauty, has suffered a century of abuse and neglect. Two billion gallons of sewage are dumped into it every day, refuse and decay line its shores, blight has barred the people from enjoying its heritage.

Early in our history, men lived with this river. For 200 years it flowed clean and beautiful, providing transportation, food, recreation and inspiration.

But we cut ourselves off from this birthright. Railroads were built on both banks. Piers and factories littered the shoreline. Municipal and industrial wastes have fouled the water. Towns have turned inward, shunning the river, too often using it as a dumping ground for abandoned cars and other debris of our civilization.

Well this day—September 26th—marks a turning point. Because this Congress and this Administration believe that technology should serve man, rather than intimidate him, we are signing a bill that will begin the task of purifying the waters of the Hudson.

This bill makes possible a truly cooperative approach to the job of making the Hudson a source of pleasure and beauty.

It marks the beginning of major efforts to clean up the river; to provide pleasant beaches along its shores, which can offer relief from the pressures of urban living for millions of Americans.

Neither Federal nor State action alone would be adequate to this task. It will require the best efforts of all of us—including the towns and industries along the shores.

I believe we are up to the challenge. This bill gives us the tools to meet it.

I believe it begins a new day for one of America's great rivers. I hope it points the way for all our rivers.

There is no mischief involved here, but it is a question of having two States that have an overwhelming predominance of interest in the river able to deal under this statute.

Mr. CRAMER. If the gentleman was

attempting to propose a majority should approve it but of that majority two, New York and New Jersey, should be included, I would not have any objection to it. However, the way the gentleman's amendment is drafted, it has to be New York and Jersey, period, that can do it, without any other State. If the gentleman will accept an amendment to that, all right.

Mr. OTTINGER. All right. If I can have unanimous consent, I will strike out the words "at least" and that will conform the legislation to the gentleman's recommendation.

Mr. CRAMER. It is my opinion, I will say to the gentleman, that that will not do the job "of a majority, including the Governors of New York and New Jersey."

Mr. OTTINGER. That is all right.

Mr. CRAMER. And I will offer that wording as a substitute.

Mr. OTTINGER. I will accept the substitute.

Mr. BLATNIK. The substitute as amended is acceptable to us on this side.

AMENDMENT OFFERED BY MR. CRAMER

Mr. CRAMER. Mr. Chairman, I offer an amendment to the amendment.

The Clerk read as follows:

Amendment offered by Mr. CRAMER to the amendment offered by Mr. OTTINGER: After the word "involved" strike out the words "the Governors of at least", and insert "a majority of the Governors, including the Governors of"

The CHAIRMAN. The question is on the amendment offered by the gentleman from Florida [Mr. CRAMER], to the amendment offered by the gentleman from New York [Mr. OTTINGER].

The amendment to the amendment was agreed to.

The CHAIRMAN. The question is on the amendment, as amended.

The amendment as amended was agreed to.

The CHAIRMAN. The question is on the Committee amendment as amended.

The Committee amendment as amended was agreed to.

The CHAIRMAN. Under the rule, the

Committee rises.

Accordingly, the Committee rose; and the Speaker having resumed the chair, Mr. HANSEN of Iowa, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (H.R. 16076) to amend the Federal Water Pollution Control Act in order to improve and make more effective certain programs pursuant to such act, pursuant to House Resolution 1026, he reported the bill back to the House with an amendment adopted by the Committee of the Whole.

The SPEAKER. Under the rule, the previous question is ordered.

The question is on the amendment

The amendment was agreed to.

The SPEAKER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

The SPEAKER. The question is on the passage of the bill.

Mr. GERALD R. FORD. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The question was taken; and there were—yeas 312, nays 0, not voting 119, as follows:

\* \* \* \* \*

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AMENDMENT OFFERED BY MR. BLATNIK

Mr. BLATNIK. Mr. Speaker, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. BLATNIK: Strike out all after the enacting clause of the bill S. 2947 and insert in lieu thereof the provisions of H.R. 16076 as passed by the House.

The amendment was agreed to.

The bill was ordered to be read a third time, was read the third time, and passed, and a motion to reconsider was laid on the table.

A similar House bill was laid on the table.

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